Issue 104 ■ October ■ 1996 ■ £4.50 Overseas price £4.50 Hfl 20

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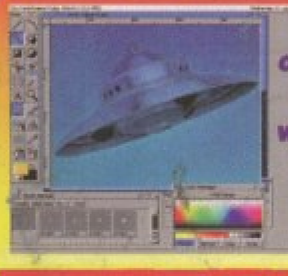
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Oct 1996

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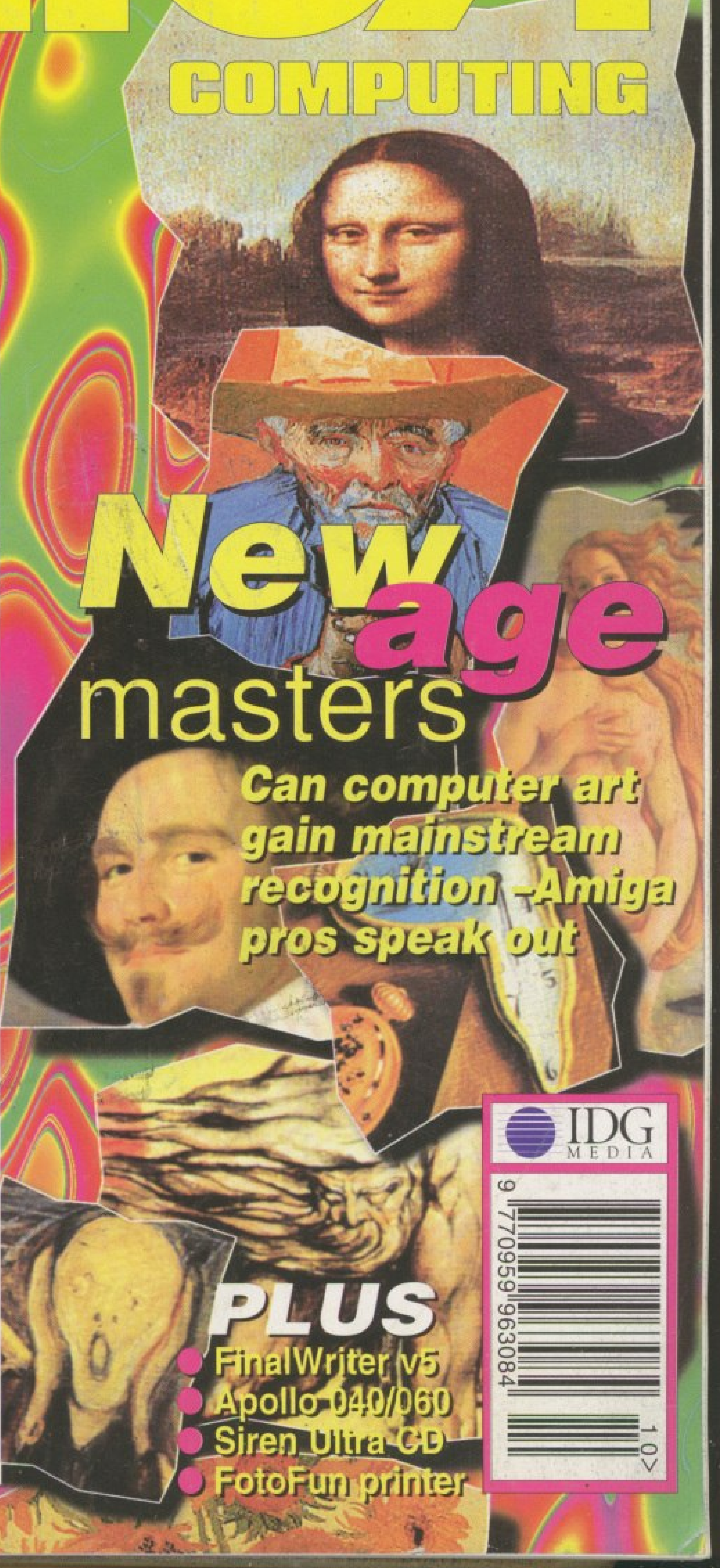
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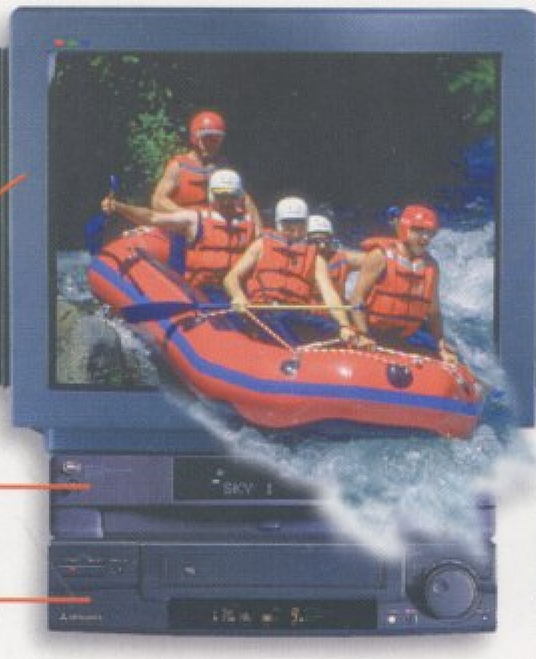
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or, Use the signal from your satellite receiver...

or, Grab TV or video pictures from your VCR's video output including S-VHS.

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Comparative MIPS performance figures measured using SysInfo. Each board had the appropriate SIMM fitted (required to activate accelerator).

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1230-IV

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2040ERC

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1260

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PRICE CRASH

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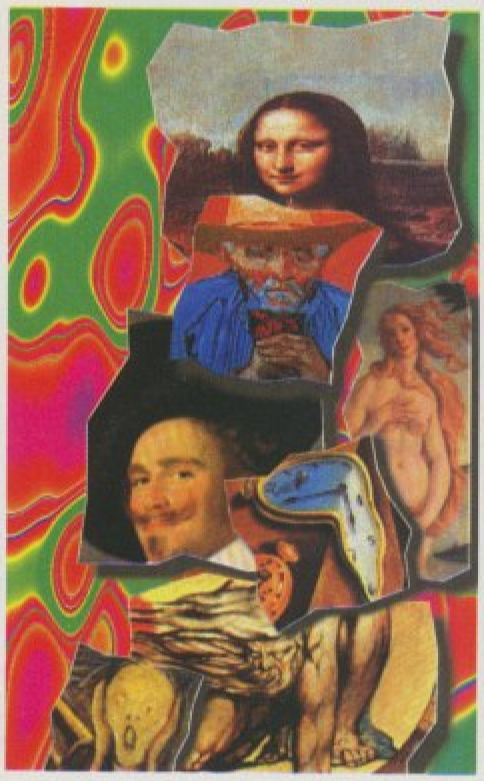
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A-Start; VMM; FindGUI; Deluxe Solitaire; MacWB; AppAssign; Popper; Trashman; DeepX; XDF; OnGo; MBPress;



COVER STORY



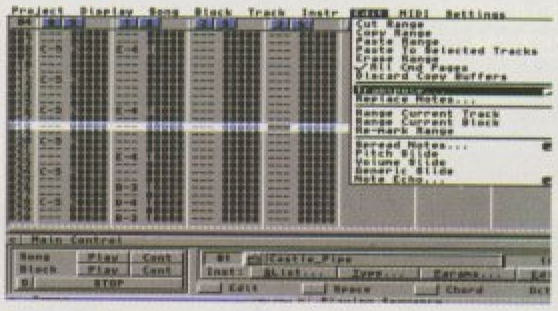
Tina Hackett talks to the artists who have swapped their paint-brush and oils for a computer





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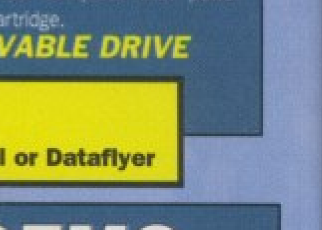
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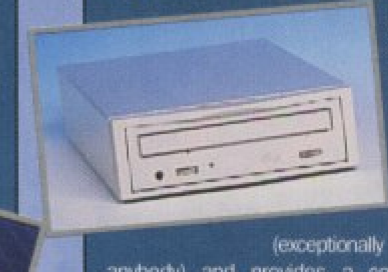
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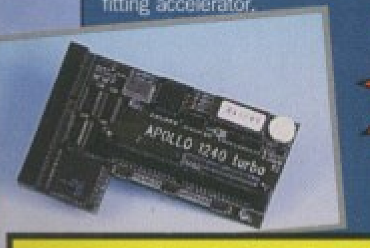
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All prices include VAT. Postage and packing will be charged at £3.50 per order (U.K.), £7.50 Europe and £12.50 rest of the world.

to place your order

The Games people Play

Has games advertising gone too far?

The advertising industry is well known for using shock tactics to get attention for its products. However, over the last few years we've seen the approach turn from the slightly risqué to the downright base. From the funny to the plain insensitive. And it seems strange that the computer games industry has fallen prey to this new strategy more than any other. Especially as it's *only* games we're selling here and not some life or death commodity. Games publishers are vigorously pursuing the trend of trying to out-shock the other as they leap across the undrawn line of what is socially acceptable.

Consider, for example, the extreme measures taken to advertise Doom, where bags of offal were sent to the media. It shocked and even horrified, but it achieved its desired effect. It got the game plenty of publicity and as the phrase goes: 'Any publicity is good publicity'. This little stunt would not get ignored and thrown in the bin along with the other countless press releases jaded journalists receive on a Monday morning.

And to some extent, it's easy to see why software publishers want to resort to such tactics. The games market has seen rapid change - it's no longer an area reserved for spotty teenagers shut away in darkened rooms playing RPGs. These people are being rapidly replaced by 'cool' exec types looking for a way to unwind. Twenty-something, upwardly mobiles who are being told that it's acceptable, even fashionable, to want the latest gore-fest computer game. So the industry had to reappraise its position and gear the market more towards this new generation of gamesplayers with fashionable adverts. And fashionable at the moment equals shock tactics.

amiga comment

So along come the ads men with their latest project, a 3-D shoot-em-up, 'Blood, guns massacre hell - the revenge', and they choose to advertise it with pictures of Dunblane. It's shocking isn't it? Fortunately this is not going to happen because it crosses the line of any sane person's moral values, but where do the ads men draw the line? Pictures of a woman hanging herself because she was sick of football was considered an appropriate way to advertise a football game. So too were the images used to promote Command and Conquer, one of which depicted Hitler with the caption: 'It's a great feeling'. Why is this more acceptable than a picture of Thomas Hamilton? Maybe because it will upset less people or because they think it is less relevant to the generation they are talking to? Who knows?

It's a matter that is concerning the Advertising Standards Authority too. ELSPA (the European Leisure Software Publisher's Association) backed the ASA up with a plea for the industry to take a more responsible approach. Whether this will be heeded is down to the publishers, but if they fail to toe the line they could see the Government taking action and imposing restrictions.

This could have harmful effects on an industry which is already under the watchful eye of the media and cautious parents. If the trend continues, people could clamp down on what their children buy just on the basis of the advertising campaign. And although the market has changed to see more gamesplayers over the age of 18, a vast percentage are still minors whose buying decisions lie with a guardian. The danger is that although you've managed to generate some publicity for a game, it's at the cost of offending people so much that they don't want your product anyway.

The games industry is a fun market, and we wouldn't want it any other way, but if all outsiders can see are tasteless adverts, what kind of message are we giving? A shocking advert at the moment would be one that stressed how good the gameplay is! Nobody is saying that advertising campaigns will be any easier if this responsible approach is undertaken, but it could show that, like its gamesplayers, the industry has grown up too.

Tina Hackett

Tina Hackett
Editor

Your Comments

If you'd like to address any issue we raise in our Comment section or feel that there is something you'd like us to cover, please write to ESP at the usual address

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For eight years Amiga Computing has been the leading magazine for Amiga enthusiasts. Amiga Computing promises to inform, educate and entertain its readers each month with the most dedicated coverage of the Amiga available

USA news

by **Katherine Nelson**

Amiga Web Browsers Released

One of the two commercial Amiga World Wide Web Browsers has officially started shipping, the other is being advertised but is not yet on the market.

AmiTrix of Canada have released AWeb-II for the Amiga. It fully supports the HTML 2 standard and some of the Netscape "enhanced" commands. The software retails for US$45, and includes some HTML tools, including the popular HTML-Heaven Web authoring software.

HiSoft of the UK have not yet released their IBrowse web browser, which has been an international coding effort. Demo versions continue to be available, awaiting the sales of the product.

To order AWeb-II, contact AmiTrix or your local Amiga dealer. AmiTrix: ++403-929-8459, sales@amitrix.com.

Olympic Amiga Impact

Atlanta, perhaps best known worldwide for hosting the Summer Olympics and best known in the Amiga community for housing the highly active Amiga Atlanta user group, couldn't keep sports and Amigas separate.

A bold statement was made by a number of Amiga companies as they donated six Amiga 4000Ts, decked to the gills, to the Olympic broadcast booth, where they act as online video editing systems. The computers housed full Video Toaster/Flyer systems donated by Newtek, as well as products from Virtual Reality Productions, Anti-Gravity Products, MicroPace, and DPS. QuikPak, the Amiga 4000T manufacturer and distributor for North America, provided the computers.

New Wonder Deal

Wonder Computers International continues to rebuild its distribution network. After months of discussion, Wonder has completed an agreement with ACT of Germany to supply and service the Apollo line of Amiga expansion cards for the North American market.

Apollo provides a full range of products, recently and most notably 040 and 060 cards for the A1200 and A3000/A4000, as well as the world's only 020 accelerator for the Amiga 600.

Further to this, Wonder has agreed with OTM to supply OTM's line of Amiga games to North America. OTM hit the Amiga scene last year with Virtual Karting and has offered a number of products since. New titles are already in the works.

Alongside OTM's games, Wonder will also carry XP8, the recent Stardust/Asteroids clone.

Contact Wonder Computers at 613-721-1993.

New CD32 Title Released

Bigg Wolf, until recently a computer and video retailer, has decided to try its hand at publishing on the Amiga. Final Gate, a new CD32 title boasting FMV-quality graphics, has been released and will be shown at Montreal's Amiga Convention '96.

For purchasing information (both end-user and dealer), contact Bigg Wolf at ++301-933-5030.

Amiga Convention '96

The first week in August brought on Canada's first major Amiga-only expo of the year, and the biggest so far of 1996 for North America. The Montreal Amiga Convention, independently organized, drew together users, dealers, and developers from across the continent to meet, exchange ideas, and no doubt fire a few questions to VIScorp's attending representatives, VP of Business Development David Rosen and Communications Manager Jason Compton.

Also anticipated was a strong presence from National Amiga, the Canadian-based Amiga retailer which does the bulk of its business online–so much success that their retail area was expected to be among the largest at the show. Wonder Computers International and its distribution division will show off their newly introduced products for the North American market.

Dale Larson and Al Mackey of IAM are expected to be present, as they were last year, to address the public in the many seminars offered at AC. A more detailed report may follow in a future issue.

Later in the year, the World of Amiga Toronto is expected to be held. Plans are also underway for Gateway '97 in St. Louis for early February 1997.

Capital Punishment

Expected at Amiga Convention '96 is the final release demo of ClickBOOM's Capital Punishment, which the Toronto-based game development company has announced will be available on Friday the 13th of September.

ClickBOOM first started making waves in the Amiga game market last December, when the first CP demos were made public at the World of Amiga Toronto. Now, one of the most impressive beat-em-up games in recent memory is finally ready for release.

Alexander Petrovic, manager of ClickBOOM, has decided to self-publish the title after discussing the product with a number of Amiga games houses. To help promote the title, the company is offering a free Capital Punishment T-shirt for all pre-orders of the game, which cost UKP25.

ClickBOOM can be reached at PxL Computers, ClickBOOM, 1270 Finch Ave. West, Unit 13, M3J 2G4 Toronto, Canada.

MindEYE

Geodesic Designs of Atlanta has taken advantage of the Olympic focus to announce that the MindEYE will hit the market shortly. Based on the MindLight of the late 80s, the MindEYE is compatible with all Amigas, and is a small device that plugs into the joystick port. It "listens" to either the room around it or a microphone feed and turns the sound through geodesic math transformations into sometimes interesting, sometimes bizarre video displays (AGA enhanced when available) on the Amiga screen. For DJ and video-wall scenarios, the device is quite popular.

Mark Adams of Geodesic used the Amiga Atlanta 10th Anniversary of last January to test the waters of the reintroduced MindLight. The demonstration was well-received. The MindEYE has a suggested retail price of US$595. MindLight users can upgrade for $195.

Contact Geodesic Designs at ++770-822-0566, 770-338-8874 fax, markadams@geod.com e-mail. The MindEYE Web site is at http://www.mindeye.com/

news

By **Tina Hackett** & **Hugh Poynton**

IIYAMA CUTS PRICES

Iiyama, the leading computer monitor manufacturer, announced a 5% price reduction on its Vision Master 17 colour monitor. Iiyama's price reductions are due to the improved Yen/Sterling exchange rate and cost reductions at the factories.

Consumers will now be able to make a £10 saving on the Vision Master 17 high specification 17" monitor. This means you will be able to purchase it for £529 + VAT Only the 17" monitors will be reduced, but all Vision Master monitors come with a 3 year warranty. For further details telephone Iiyama at (44) - (0) 1438 74 54 82



The Vision Master 17 from Iiyama has been reduced in price

FINAL WRITER

Following on from the piece in the USA News last month regarding Final Writer 5, please note that you should use the contact number corresponding to your country (or nearest). Harwood can be reached from the UK on 01773 836781. For the US this is 602 431 1461.

COMPUCENTER CRIMEFIGHTER

Computacenter, one of the countries top IT solutions providers, is launching a business advisory service to help combat crime on the Internet.

Martin Hellawell from Computacenter commented,

"Firms connecting to the Internet or setting up Intranet networks need to reconcile easy system access with the protection of internal networks. Around 85% of the Times 1000 companies are either linked up to, or are considering linking upto the Internet. However, if there is one main stumbling block to the widespread adoption of linking up to the Internet by corporates it is the question of security." According to the 1996 Audit Commission, a preventable security breach on average costs a British Firm £16,000.

To help prevent these expensive abuses of the Internet, Computacenter has implemented a widespread research programme which will determine what aspects of computer security are the most vulnerable security loopholes in networks and operating systems, as well as the companies most at risk. The results of this will be available later this year.

AMIGA HEAVEN

A new computer store has opened in Northampton which claims to stock the largest selection of Amiga games in the country. Direct Software aims to cater for all the Amiga owners in the country who have found that other games stores don't stock a great variety.

As well as the hundreds of titles in stock, Direct Software will try to get any title requested, no matter how old or obscure. They also operate a mail order service.

The store is also in contact with new software houses and will stock games currently only available through mail order, such as BMP's Reality and Space Fighter. Direct Software is also in the process of making its own game using fully rendered animation intros, clips and real film footage.

Direct Software are running a competition to decide the name of their new outlet. A copy of Team 17's Killing Grounds is up for grabs so if you have any imaginative ideas for the store's name, write to Direct Software, 166 Birchfield Road East, Northampton, Northants NN3 2HF or phone 01604 722499.

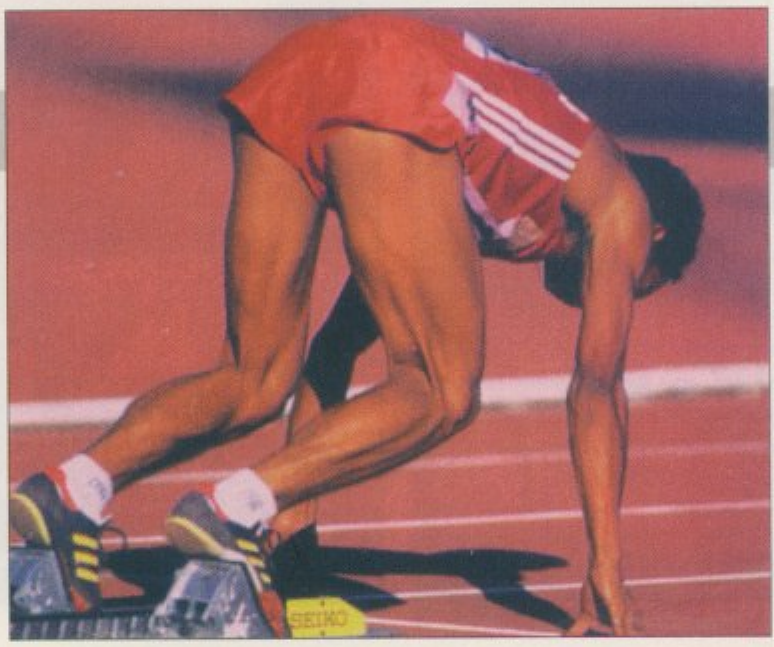
OLYMPIC IMAGE

A revolutionary new imaging centre at the Olympic Games in Atlanta, is being used to capture and dispatch images to picture desks across the world.

Kodak, the world-wide sponsors of the games, have established a 20 workstation Imaging centre that allows the press to scan and transmit images to anywhere in the world over ISDN lines.

Everything photographers need to do is located in the 20,000 square foot centre. As Mike Tette, manager of the Kodak Olympic programme said: "Everything photographers need to do the job is located in one place. They can shoot for three or four hours at the venues, bring back the film for processing, edit it, scan the image, enhance it in the Adobe Photoshop software, output the image on a thermal printer, ColorEdge copier or Photo CD disc and send it anywhere in the world...".

The centre, staffed by 175 lab technicians and Kodak representatives processes an estimated 10,000 rolls of film a day.



VIRTUAL ATLANTA

To get the latest coverage of the Olympic games have a look at CompuServe's new service which aims to bring the latest results from Atlanta. From the main menu (GO ATL-GAMES) you can access news•reports from contributors such as Sports Illustrated, Time and USA Today.

You can find out the latest scores and even chat with other CompuServe members about the games. Martin Turner, CompuServe's UK general manager commented, "We built this area using the latest open standards technology, demonstrating our ability to deliver timely, easy-to-use services both to CompuServe users and those on the Web at large."

More news from CompuServe is their announcement of a new UK network which offers speeds of 28,800bps and 57,600bps for the price of a local call. This new 'super network' which offers ISDN access has been simplified which four numbers to choose from.

Martin Turner said, "We have promised our 350,000 UK members a service that would be fast and very efficient and now we are delivering it." More information is available for members on 0800 000400. To join you can call 0800 000200.

ANYBODY FOR SUNDAY SCHOOL

If you're an Amiga user and you live in the Wigan or West Lancs area why not while away those boring Sunday afternoons at the Amiga User Group at St. Thomas The Martyr School Hall, Highgate Road, Up Holland, Lancs?

Learn about graphics, hardware, music, networking and programming and take advantage of the huge choice of free software available. Admission is £2 and refreshments are available.

Their new contact number is either Stephen on 01695 625063, or Simon on 01257 402201.

PROTECT THE INNOCENT

The Internet has been a cause for concern to parents so children's charity NCH Action for Children will be bringing out a guide at the Live '96 show.

The leaflet will give parents advice on topics such as pornography on the Internet, safeguards that parents can install and the dangers posed by Bulletin Boards. There's also advice on how parents can access the educational sites for their children in a safe way.

Caroline Abrahams, principal policy officer at NCH Action For Children said, "We're not saying don't let your children use the Internet, we're saying make sure that they use it safely. The Net can be a fascinating learning ground for people of all ages but it's up to parents to ensure that the information is suitable for their child, particularly when it comes to pornography and chat lines."

The leaflet can be obtained at Live which runs from 25-29 September at Earl's Court London or alternatively by writing to: Information Department, NCH Action For Children, 85 Highbury Park, London, N5 1UD.

HIQ INFO

Apologies to anybody who has been trying to contact HiQ - we put in their old contact number in our review. They can be reached at (UK) 01525 211327

ANNOVATIVE TAB SIMM LAUNCH

VTEC Industry Europe has been appointed the European importer and distributor of the new Panasonic TAB SIMM memory. The TAB SIMM memory has a number of new innovations which make the product unique.

In response to the increased theft of memory products, each Panasonic TAB will be marked with a serial number and product code to enable easy tracing of stolen goods. Another feature of the TAB is the metal shielding which improves reliability and protects the memory from electrostatic discharge. The memory module is compatible with every motherboard on the market and VTEC offers a lifetime warranty with next day replacement.

AVERY REDESIGNS

Avery Office Accessories, part of the Avery Dennison Corporation, has revealed its new redesigned range of computer furniture which includes computer and printer stands and VDU trolleys. The new range is softer and more elegant, combining strength and stability with a lightweight design that enables the furniture to be moved easily and safely.

According to Jan Perry, Marketing Communications Manager: "The new design reflects the increased emphasis on design and appearance in the office of today. Crucially, though, it incorporates a high degree of flexibility, ensuring it will remain compatible with the fast developing demands of office technology."

VULCAN UPDATE

News from Vulcan Software this month is that a Web site is in the offing which will keep you up-to-date with the latest game developments, hints and tips and previews. They will also be releasing Tiny Troops - that very promising game that was originally in the hands of Mindscape. They can be reached at 01705 670269.



Check out hints and tips from the new Vulcan Software web site

OKI DOKEY

Oki Systems have just launched four new dot matrix printers. The nine-pin ML3320 (narrow column width) and the ML3321 (wide column width) are ideal for speed processing high volume data and word processing applications. Print speed is 435 characters per second in super-draft mode at 12 characters per inch. Other speeds include 387 cps, 290 cps and 73 cps.

The 24-pin options, the ML3390 and ML3391, are available as narrow and wide carriages and can print at up to 360 cps in utility mode and at 120 cps in letter quality mode (at 12 cpi).

ESCOM FILE FOR BANKRUPTCY

Escom AG have announced that they will be filing for bankruptcy. The news comes after months of troubles for the company who reported losses of US$118 million in 1995 and suffered poor Christmas sales. Manfred Schmitt, the companies general manager resigned and they sold off their Amiga Technologies subsidiary to VIScorp - only a year after they had bought the company.

The 1000 UK workers have been told that the UK unit will have to close whilst the division in the Netherlands is thought to have been sold off through a management buyout.

As far as the future of Amiga Technologies goes, VIScorp will finally take control of AT on August 19. Until then, it is understood that the business will be run with the approval of the bankruptcy trustee Hembach.

BLITTERSOFT LATEST

Blittersoft have announced that they are now an authorised PHASE 5 main dealer. Blittersoft will now be supplying the full range of Phase 5 products which includes CyberStorm MKII 060-50MHz - 649.95, CyberStorm MKII 040EC-40 - 379.95, Blizzard 1260 50MHz - 579.95, Blizzard 1240EC-Tower board - 279.95 and the SCSI-II for Blizzard 1260-99.95.

More news is their announcement of the CyberVision 64/3D which will be released in September. Phase 5 digital products will release this new generation graphics board, the CyberVision64/3D at a very competitive price. Designed for use as either a Zorro-II or Zorro-III board it will work in all Amiga 2000, 3000 and 4000(T) series models as well as with tower modifications of Amiga 1200 series models equipped with Zorro-II backplanes. The new board will have the Virge graphics chip with 3D capabilities which is produced by S3. The chip can do complex 3D functions in hardware, like shaded and textured surfaces with trilinear filtering as well as shading and fogging, for example.

A new Picasso graphics card will also be released in September, called Picasso IV. The board is fully Zorro II/III auto sensing, with features such as 64-bit Cirrus Logic 5446 Chip, Max Pixelclock 135 MHz, and Flicker fixer on-board. It also has Video on Workbench - a scalable live video window on Workbench.

INTO THE MILLENIUM

Everyone is looking forward to that big party when we move into the next millennium - that is everyone except those who may be affected by their computer not recognising the fact that it is the year 2000.

Basically, computers have only been programmed to recognise dates up till then and the new date could cause massive problems. So recently, the British Standards Institution got together to decide if their department, DISC, should have a role in resolving the problem.

They met up with IT specialists from major UK companies who agreed that awareness of the millennium problem needs to be raised.

DISC plan to develop a Code of Practice which defines the term "Millennium compliance" and will set out guidelines for establishing compliance for vendors and users. It was also decided that all British Standards involving the representation of dates in IT systems should be updated to reflect the need for greater discipline and accuracy in applying them.

OOPS

In last month's Photogenics review, Neil Mohr got too big for his boots and said Photogenics uses Class Act gadgets - oops, sorry, it doesn't. It has only been included on the CD so that you can use AWeb. Incidentally, current owners of Photogenics 2 might like to know that there is an update available. Contact Almathera for more details on 0181-687 0040.

AURA SHAKES THINGS UP

Aura Distribution Services announced this month that the Aura Interactor virtual reality backpack will available in the UK from September onwards. The Aura Interactor was released in the US a year ago and so far 1.4 million people have bought the device. It's now available in the UK for the price of £69.99

The Aura Interactor is, basically, a pack which straps on to your back and allows you to feel the sound from a computer game.

It works on the concept that low bass noises are mostly felt rather than heard. The Interactor responds to the bass sound effects of a film or video game and actually allow you to feel the rumble of explosions, crashes or punches. As well as seeing and hearing the action, you can also feel it.

The Aura Interactor is compatible with any games machine or television which has a headphone socket or audio output. For more information phone: 0171-331 5300.



Feel and hear all the action of beat-'em-ups with the Aura Interactor

Extracting CoverDisk files

Before you even think of putting the cover disks anywhere near your computer, you should make sure you write protect them. This is done by moving the black tab in the top corner of the disk so you can see through the hole. You cannot then damage your disks in any way. There is also no reason why the cover disks need to be written to, so even if the computer asks you to write enable the disks, don't do it!

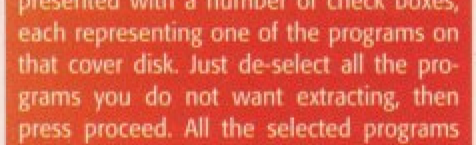
To extract any single archive, simply double-click its icon and follow the on-screen instructions. If you want to quickly extract the program to RAM, select the NOVICE level on the welcome screen, press proceed once on the current screen, then again on the next. The program can then be found in your RAM disk. Normally most programs need further installing, so read the documents on how to do this.

Hard Drive Users

Hard drive users do not have to boot with the first disk, but you must make sure you have the Amiga's *Installer* program in your C drawer. To make sure your hard drive has the correct files in place, double-click on the **SetupHD** icon. This will check if you have the Installer program. If not it will copy it across - don't worry, it will not write over any existing files.

All you hard drive owners will find MultiExtract very useful. It is a separate method of extracting the cover disk files. It allows you to extract a number of files in one go, to your hard disk or RAM.

When you run MultiExtract, you will be presented with a number of check boxes, each representing one of the programs on that cover disk. Just de-select all the programs you do not want extracting, then press proceed. All the selected programs can now miraculously be found in the selected destination.



This is MultiExtract for all you sensible people with hard drives



The coverdisks

Is this Photoshop for the Amiga? A truly outstanding new art package from the author of StormC

Installing ArtEffect

If you can use the normal Amiga Computing installer, you should have no problems getting ArtEffect up and running. You should extract ArtEffect straight onto your hard drive, as once done it can be run almost straight away.

Before you do run the program you will need to double-click the installer icon in the ArtEffect drawer. This copies a library across and will set up an assign that ArtEffect needs. Once you have done this you will be able to run the program with no problems. People with only 2Mb of Ram can use ArtEffect, but they will have to use a 16-colour screen and make do with only a fraction of the program's power.

DISK 1



ArtEffect

Author: Haage and Partner
Workbench 3.0

Just when it was getting to the stage where it seemed like a truly new program was never going to be released for the Amiga, and we would be stuck with the ever increasing updates of Wordworth and Final Writer, bang! An all-new art program appears on the scene.

From the same people who produced StormC, ArtEffect unites painting and image processing under a particularly productive user interface. When the program was in development, emphasis was placed on providing productive functions which are quick and simple to use. So, beginners and professionals alike are well catered for.

ArtEffect is not 'just another' graphics program for the Amiga. Neither is it oriented towards the current 'standard' Amiga programs, but rather to classic image processing programs such as Photoshop and creative painting packages such as Fractal Painter.

The proven concepts and ideas of these classic programs have been merged with the uncontested advantages of the Amiga, and you can see the results for yourself.

Particularly important are the functions that allow you to select certain areas of an image for processing. Of course some filters are applied to the entire image, but when dealing with touching up images, it is necessary to select a particular area. So, one can retouch a scanned photo in a specific area without affecting the rest of the picture.

ArtEffect offers more than 30 different effects with countless options. All effects are used in the same way, and they all have the same user interface. Each function has a preview window in which the effect is applied to an image section. The preview area can be zoomed in and out and a progress bar shows how much of the operation has been completed.

While many of the Amiga's normal bitmap paint programs only allow painting in a single colour, ArtEffect gives you access to a full range of natural paint tools that allow you to simulate paintbrush, crayon, airbrush, chalk, coal and oil colours.

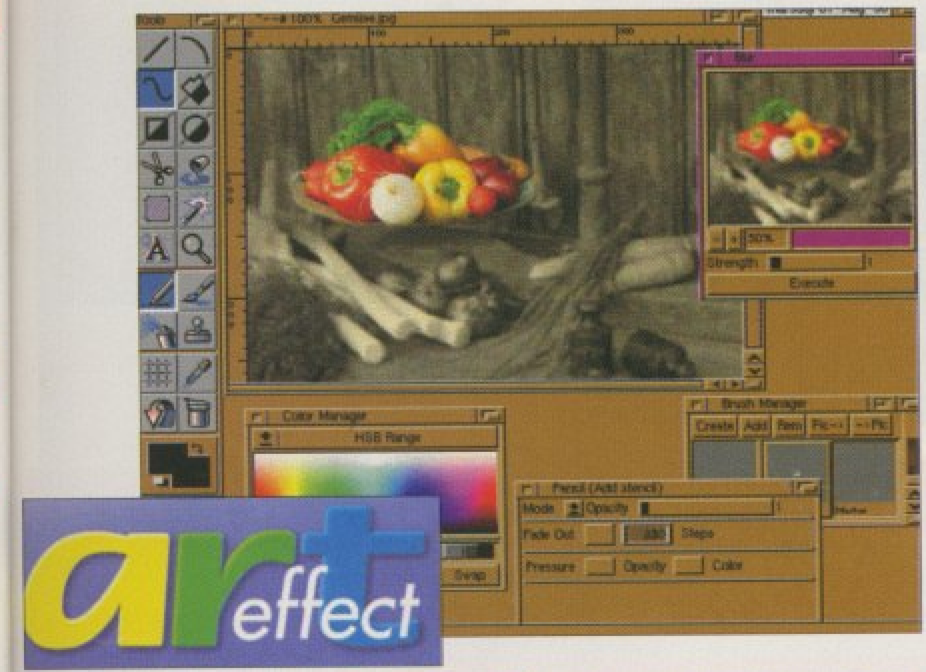
To do a good job of simulating all these drawing tools, ArtEffect offers many controls for the mode, opacity, intensity, density, roughness, form etc. With this, everything from the transparency of water colour to the harsh look of chalk can be simulated excellently. ArtEffect goes one step further and even offers you the ability to paint on different materials, such as canvas, wood, stone, marble etc.

The properties of the three basic tools - stencil, brush and airbrush - can be completely redefined. The form, intensity, density, roughness, transparency, opacity, pressure sensitivity (only on graphic tablets) and Fade Out can be adjusted freely. With all these properties, natural drawing tools can be simulated very well, and without any fringes. The properties of these tools are stored in the brush manager.

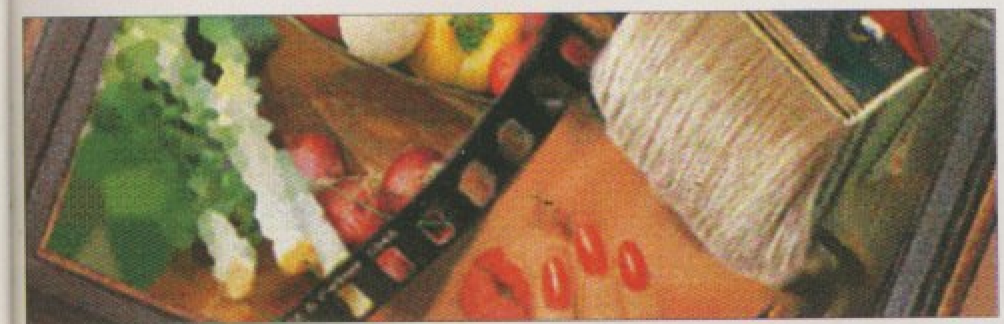


ARTEFFECT FEATURES

- ArtEffect is a pure 24-bit art package. All operations and manipulations are carried out in the highest possible quality
- All functions in ArtEffect are very fast. Some time-critical filters are even optimised for higher processors
- ArtEffect can display multiple views of the same picture
- A special light table allows pictures to be overlayed
- A special perspective tool supports the creation of perspective drawings
- Further important features are: Zoom, Pipette (for colour selection) Lasso (for freeform selections), Colour Interpolator and Undo function
- ArtEffect offers many loaders/savers (IFF, JPEG, TIFF, GIF, PNG, BMP), and also the Amiga Datatypes and the new 24-bit datatype
- ArtEffect offers an efficient 24-bit printer driver that uses the standard Workbench drivers. There is additional support for TurboPrint and Studio
- ArtEffect supports the graphic tablet Wacom ArtPad II (a special driver is needed!). With the graphic tablet, all drawing modes become pressure sensitive. This is very important for natural drawing
- ArtEffect can be extended externally by a flexible Plug-In interface, which allows third party companies to offer new functions. There is also a special GUI for these Plug-Ins, so programming them is very easy







STENCIL

One of the powerful features of ArtEffect is its stencil function. This is sort of an amalgamation of Photoshop's magic wand and Photogenic's paint layer. In Photoshop the magic wand allows you to select areas of a picture that contain similar shades of colour, so when you apply an effect it is only applied to the selected area.

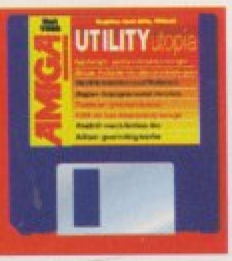
ArtEffect lets you have this quick area selection but instead of using Photoshop's basic outline it gives you the ability to directly 'paint on' this stencil layer, in a similar way to Photogenic.

As both methods are combined, it makes for an incredibly easy way of selecting areas that you do not want to be affected by one of ArtEffect's processes. Or, by using the invert, you can mark the area you want to be affected then select invert masking off the rest of the picture.

To give you even more control there are extra menu items that allow you to expand or reduce the size of the masked-off area. On top of this there is a feather command that will 'fade in' the edges of the stencil to any background graphics or effect applied over it.

The colour selection tool allows you to define the stencil by picking specific colours

DISK 2



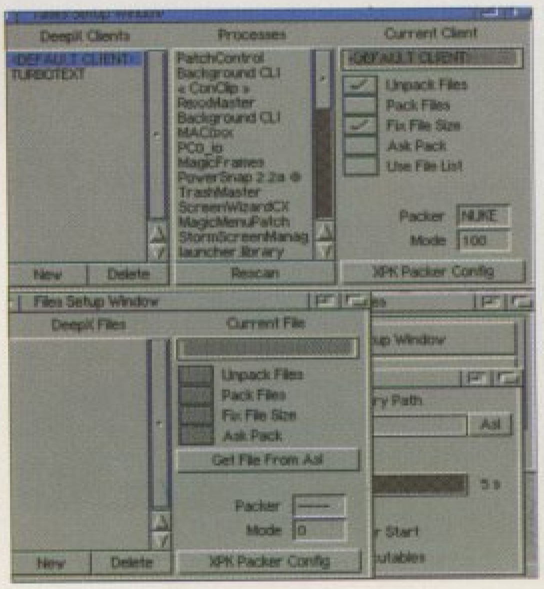
DEEPX

Author: Adam Ciarcinski
Workbench 2.04

Anyone who's heard of disk doubler will know about the basics behind DeepX. It is a program that runs in the background and waits for programs to load or save files. When they do, it compresses and decompresses them, so saving up to 50% disk space (normally you can expect to save on average 30%).

DeepX is a commodity that will run quietly in the background, watching programs and files. If you want DeepX to watch a program, run the program and select it from the list of tasks. You can now select what type of compression the program's files should be crunched with. You can also choose not to have saved files compressed. DeepX allows you to choose files by a directory path and with pattern matching, making it even more flexible.

As it uses the standard XPK compression libraries, there are a huge number of compressors available, and for each program you can choose an individual compressor.



Flexible and easy to set up and use, DeepX will help you save disk space

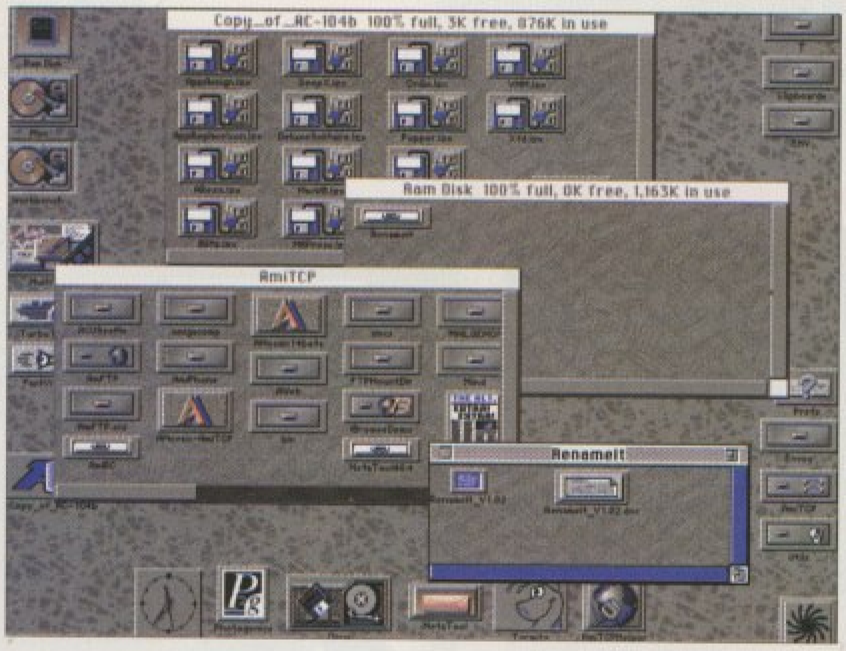
MacWB

Author: Daniel Balster
Workbench 3.0

Well, I gave in to temptation, again. For some reason I just like all these stupid hacks that change the way your Workbench looks. This latest one will give all your Workbench windows a Mac-style look, but they're about 10 times as fast as a real Mac window.

To get MacWB running you need to copy the Chicago font into your fonts drawer, copy the MacWB command to your C drawer and add the line:

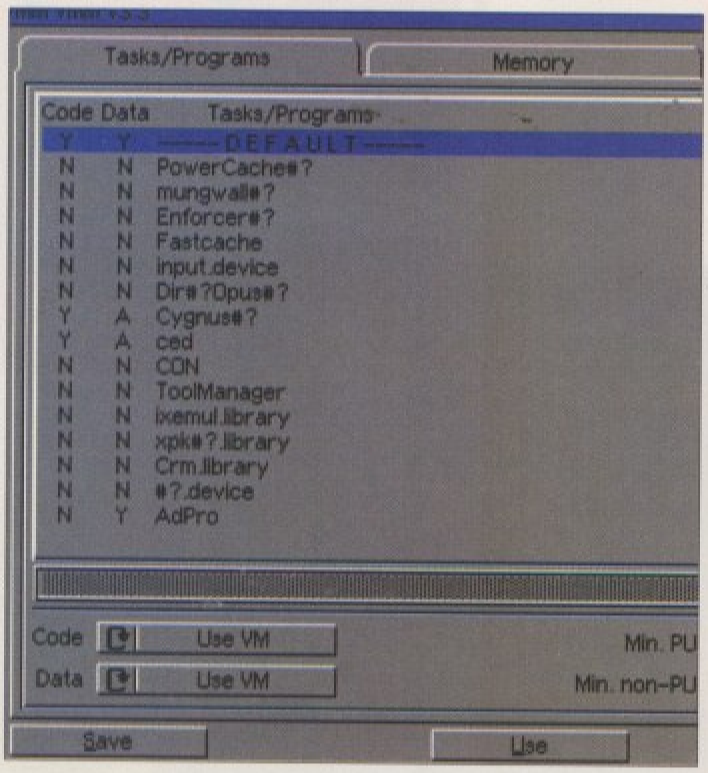
run >nil: ***Author: Martin Apel***
Workbench 2.04
A MMU processor



You never seem to have enough memory, and even with the recent drop in the price of Simms, adding extra memory is not going to be cheap. What you need is virtual memory. This is when the operating system 'fools' programs into using hard drive space as actual memory. What actually happens is that using the MMU found on the full versions of the 030, 040 and 060 chips, pages of memory can be swapped between the hard drive and your real memory whenever a program accesses it.

Virtual memory is a lot slower than real memory, as the pages have to be moved off the hard drive, but some memory is better than no memory. There are MUI and Bgui versions of the preference program, so one of those should suit you needs.

You will never be short of memory again



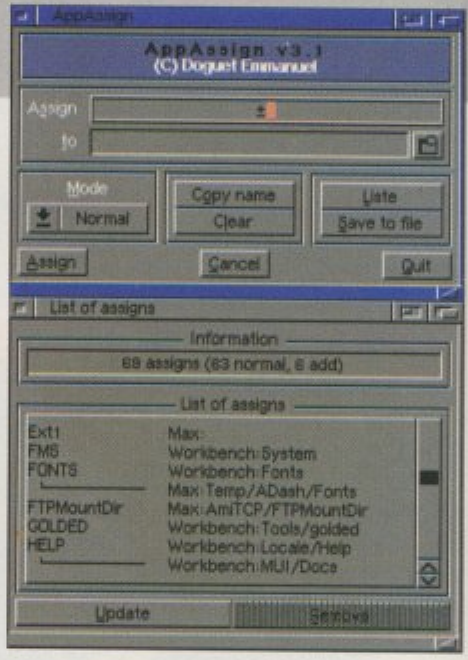
AppAssign

Author: Doguet Emmanuel
Workbench 2.04

Assigns are a constant pain in the rear for Amiga users. The situation has got a little better with the good old Installer setting them up in the user startup, but there is always going to be a time when a program is going to need one.

AppAssign is a little program that makes assigns a little easier to sort out. The current assigns can be listed and removed, and new assigns can be made either using a file requester or dropping a drawer or program icon into AppAssign's window.

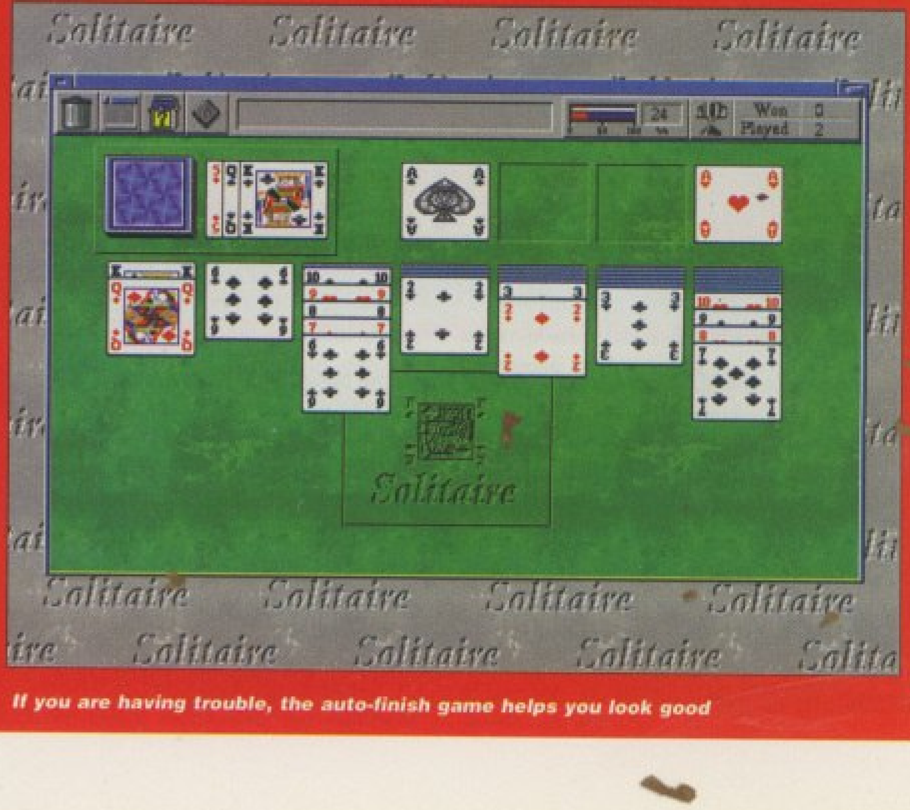
Making your life easier, AppAssign sorts out those troublesome assigns



Deluxe Solitaire

Author: Martin Longstaff
Workbench 2.04

What, another card game? Well yes, but this one is a real good looker. If you have ever wanted a decent playing patience game, this one will suit you down to the ground. Based on all the card games you get on the PC and Mac, Deluxe Solitaire aims to look every bit as good and play just as well. Go on, give it a go, and if you do not know the rules, ask someone.



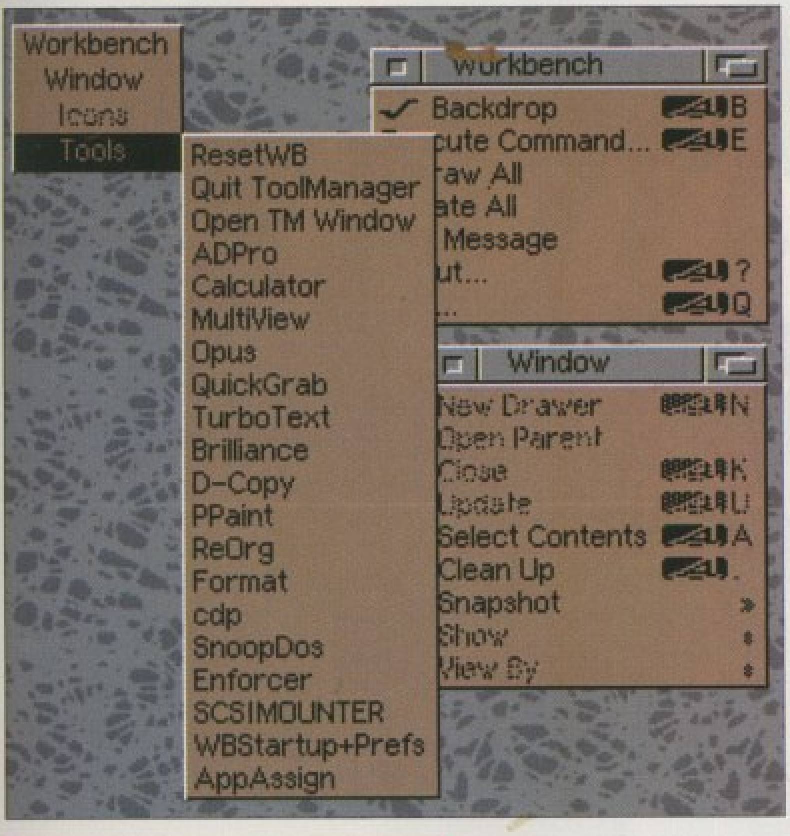
If you are having trouble, the auto-finish game helps you look good

Popper

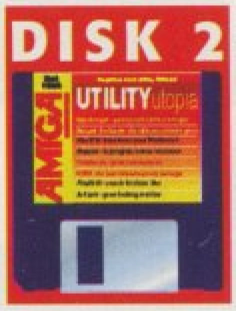
Author: Pierre Baillargeon
Workbench 2.04

Magic Menus have been around for a long while now, and nothing new has been added. But if you are looking for something that can provide a little more in the way of functions, Popper could be what you want. As well as giving you the normal new pop-up menus that Magic Menu provided, Popper has the extra feature of tear-off menus.

So, if you regularly need to access the Window menu on Workbench, press the right mouse button, select the menu and press the left button. The menu will now stay on the Workbench and a window bar will appear on top of it, allowing you to drag it around, push it to the back and close it when you like. If you want to update a window, select it and then the update menu selection.



Stealing ideas from X Windows, Popper lets you litter menus all over the screen



Trashman

Author: Tomasz Muszynski
Workbench 3.0

The Amiga's operating system has loads of nice features. It does have a nice trashcan, but it's not very good having one on each separate partition. We've had replacement trashcans in the past, but this one is the best so far.

From a single Appicon you can happily delete and retrieve all your files. It will move all the files off to the trashcan directory and remember their original location if you want to retrieve them at a later date. It also has automatic trash handling - if the drive becomes full it will start to remove files from the trashcan directory, giving you more space.

On Go

Author: Tak Tang
Workbench 2.04

Windows 95 has started something of a fad on the Amiga, with a number of people putting out their own version of the PC start bar. Well, On Go is another similar attempt at copying it, but it has a number of differences from all the other current start bars.

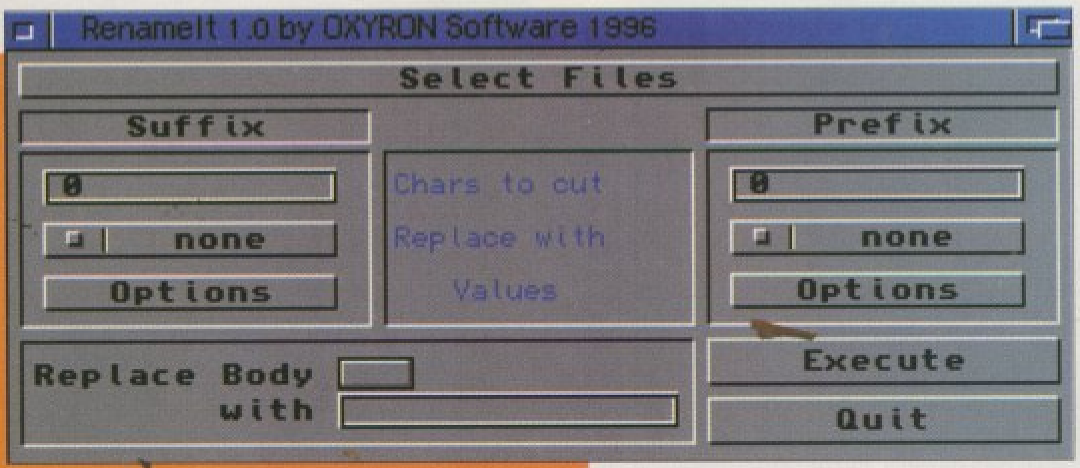
What makes On Go special is that along with the normal program launcher and the fact it is a full commodity, it implements 'virtual screens'. This lets you have multiple Workbench screens, even though it appears you only have one. On these screens you can have different windows open and flick between the different Workbench screens. Which is nice. Currently, to configure On Go you have to manually edit the config file, but this is fairly straightforward.

RenameIt

Author: Oxyron
Workbench 2.04

The horror of renaming hundreds of files! Well alright, this might not be something you come up against every day, but for people who deal with large animations and have many similarly named files with number extensions, this is a distinct possibility.

RenameIt is a program to help you get around this nasty situation. It allows you to rename multiple files in various different ways. Primarily it allows you to alter the suffix and prefix of file names.



XFD

Author:
Workbench 2.04

This is a set of specialised libraries that was written so as many different compression libraries and crunchers could be supported by one single library, thus allowing programmers to support all different types of compressor without needing to know anything about them.

MBPress

Author: Steve Anderson
Workbench 2.04

To go along with the AmigaGuide medical this month, MBPress is a tiny program that is used to detect what combination of mouse buttons are being pressed. By holding down one of the mouse buttons at bootup, you can select a different startup sequence.

Faulty disks

If you should find your Amiga Computing CoverDisk damaged or faulty, please return it to:

TIB Plc, TIB House, 11 Edward Street, Bradford, W. Yorks BD4 7BH.

Please allow 28 days for delivery

Caught in the Net

NetConnect promises even easier net access for Amiga users. **Neil Mohr** takes a sneak preview

With the recent boom in media coverage of the Internet it seems everyone is slapping together all-in-one Internet access packages – first Amiga Technologies with their Surfer pack and most recently HiSoft's Net & Web. NetConnect is hoping to surpass both these products by offering simplified configuration and setup along with the latest versions of the most popular Internet programs.

The first thing that will strike you about NetConnect is the toolbar front end, from which all the configuration and programs are accessed. The toolbar is very reminiscent of the docks used by ToolManager and is setup in a similar fashion, allowing variable rows and columns of either icons or text buttons.

Anyone who has had a look at Miami will be glad to know that NetConnect has 'borrowed' the simple setup front end used to configure all the aspects of logging on to your Internet provider.

NetConnect will simplify this even beyond what Miami offers by maintaining a list of Internet providers and their details, so making the initial setup a matter of selecting which country you live in, your provider and the local PoP you will be using. Currently the NetConnect database covers a 140 providers in 30 different countries, 40 of which are British.

Once this is done you are left with having to enter your own specific user details such as user name and password. As with Miami there is a large list of modems which, if it includes yours, will handle the modem initialisation automatically.

So NetConnect gives you a good program launcher and set up interface but what else does it offer? Well for starters you will be getting AmiTCP 4.3, the latest version of the ubiquitous TCP/IP stack which has quite a few advancements over previous versions, generally making it far easier to configure and setup. This is an advantage over Miami which uses its own specific TCP stack and could cause compatibility problems with some software.



An up-to-date version of Voyager will make Web browsing an easy task

There will also be the latest version of AmFTP – in my opinion the best FTP program around – along with AmIRC, again one of the best IRC clients available for any computer. Both these programs should be getting an updated interface for the NetConnect release making them even easier to use.

Web support will come in the form of Voyager v1.1. This is not going to be as complete as Voyager NG which will support everything that NetScape does, but it will add tables and possibly animated Gif support. This means the majority of Web sites will be perfectly displayed. Additional programs such as AmTelNet and mFinger both look good and are not provided for currently by the other Net packages.

Due to the heavy use of MUI – well all the programs use MUI – the latest version will be bundled with NetConnect. This version will be 3.5 and has many more bug fixes along with even more speed increases and new pop up menus.

Currently NetConnect looks an excellent all-in-one package with a lot of thought having gone into it. With the final version all the programs will be installed from a single installer that will also initially set up your account and provider details letting you get linked up and on-line as soon as possible.

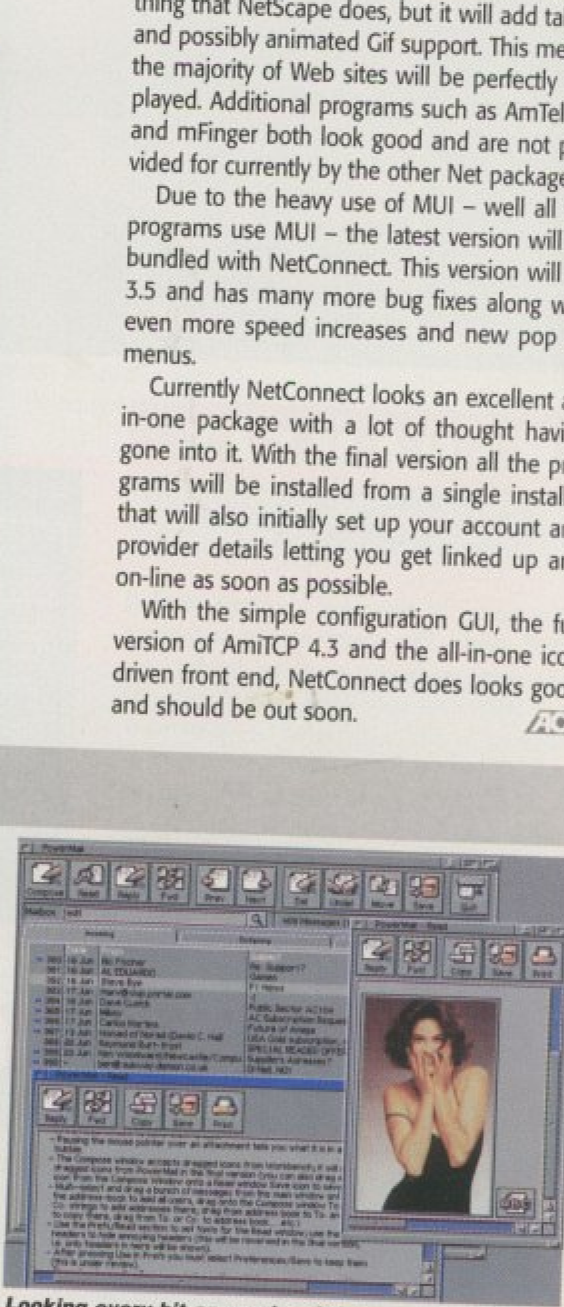
With the simple configuration GUI, the full version of AmiTCP 4.3 and the all-in-one icon driven front end, NetConnect does looks good and should be out soon.

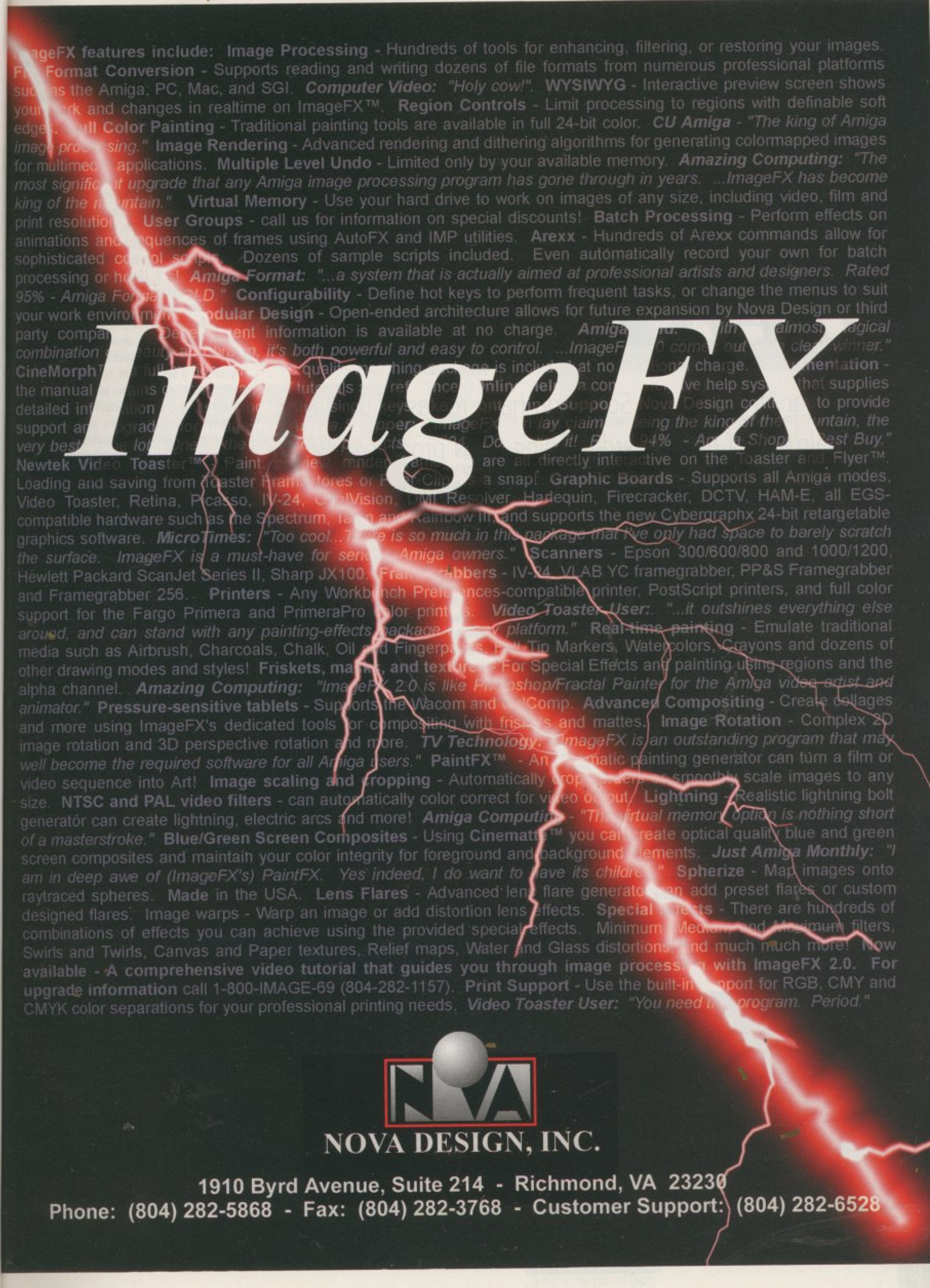
PowerMail

One of the completely new programs that comes with NetConnect is PowerMail. Written by the author of MetaTool, a Mime compliant mailer, PowerMail is the next generation version of the original software.

Taking advantage of all the new features introduced in MUI 3 PowerMail's interface is fully drag and drop, allowing you to move mail attachments to the clip board, between mails and save them off to disk. Another spin off is that if you multiselect a bunch of mails and drag them over to the address book all the email addresses of the people who sent these mails will automatically be added to the address book.

Any included images will be displayed in-line with the received mail and similarly images can be dragged over into mails and will be automatically decoded as part of the mail using the installed Datatypes.


Looking every bit as good as it is to use, PowerMail is an excellent Mime mailer



ImageFX
ImageFX features include: Image Processing - Hundreds of tools for enhancing, filtering, or restoring your images. Format Conversion - Supports reading and writing dozens of file formats from numerous professional platforms such as the Amiga, PC, Mac, and SGI. Computer Video: "Holy cow!". WYSIWYG - Interactive preview screen shows your work and changes in realtime on ImageFX™. Region Controls - Limit processing to regions with definable soft edges. Full Color Painting - Traditional painting tools are available in full 24-bit color. CU Amiga - "The king of Amiga image processing." Image Rendering - Advanced rendering and dithering algorithms for generating colormapped images for multimedia applications. Multiple Level Undo - Limited only by your available memory. Amazing Computing: "The most significant upgrade that any Amiga image processing program has gone through in years. ...ImageFX has become king of the mountain." Virtual Memory - Use your hard drive to work on images of any size, including video, film and print resolution. User Groups - call us for information on special discounts! Batch Processing - Perform effects on animations and sequences of frames using AutoFX and IMP utilities. Arexx - Hundreds of Arexx commands allow for sophisticated control scripts. Dozens of sample scripts included. Even automatically record your own for batch processing. Amiga Format: "...a system that is actually aimed at professional artists and designers. Rated 95% - Amiga Format GOLD." Configurability - Define hot keys to perform frequent tasks, or change the menus to suit your work environment. Modular Design - Open-ended architecture allows for future expansion by Nova Design or third party companies. Development information is available at no charge.
combination ... it's both powerful and easy to control. ...ImageFX ... clear winner."
CineMorph™ ... is included at no additional charge.
Newtek Video Toaster™ ... are all directly interactive on the Toaster and Flyer™. Loading and saving from Toaster Framestores ... a snap! Graphic Boards - Supports all Amiga modes, Video Toaster, Retina, Picasso, IV-24, ... DMI Resolver, Harlequin, Firecracker, DCTV, HAM-E, all EGS-compatible hardware such as the Spectrum, ... and supports the new Cybergraphx 24-bit retargetable graphics software. MicroTimes: "Too cool... There is so much in this package that I've only had space to barely scratch the surface. ImageFX is a must-have for serious Amiga owners." Scanners - Epson 300/600/800 and 1000/1200, Hewlett Packard ScanJet Series II, Sharp JX100. Framegrabbers - IV-24, VLAB YC framegrabber, PP&S Framegrabber and Framegrabber 256. Printers - Any Workbench Preferences-compatible printer, PostScript printers, and full color support for the Fargo Primera and PrimeraPro color printers. Video Toaster User: "...it outshines everything else around, and can stand with any painting-effects package on any platform." Real-time painting - Emulate traditional media such as Airbrush, Charcoals, Chalk, Oil and Fingerpaints, Felt Tip Markers, Watercolors, Crayons and dozens of other drawing modes and styles! Friskets, mattes, and textures - For Special Effects and painting using regions and the alpha channel. Amazing Computing: "ImageFX 2.0 is like Photoshop/Fractal Painter for the Amiga video artist and animator." Pressure-sensitive tablets - Supports the Wacom and CalComp. Advanced Compositing - Create collages and more using ImageFX's dedicated tools for compositing with friskets and mattes. Image Rotation - Complex 2D image rotation and 3D perspective rotation and more. TV Technology: "ImageFX is an outstanding program that may well become the required software for all Amiga users." PaintFX™ - An automatic painting generator can turn a film or video sequence into Art! Image scaling and cropping - Automatically crop ... smoothly scale images to any size. NTSC and PAL video filters - can automatically color correct for video output. Lightning - Realistic lightning bolt generator can create lightning, electric arcs and more! Amiga Computing - "The virtual memory option is nothing short of a masterstroke." Blue/Green Screen Composites - Using Cinematte™ you can create optical quality blue and green screen composites and maintain your color integrity for foreground and background elements. Just Amiga Monthly: "I am in deep awe of (ImageFX's) PaintFX. Yes indeed, I do want to have its children." Spherize - Map images onto raytraced spheres. Made in the USA. Lens Flares - Advanced lens flare generator can add preset flares or custom designed flares. Image warps - Warp an image or add distortion lens effects. Special Effects - There are hundreds of combinations of effects you can achieve using the provided special effects. Minimum, Median and Maximum filters, Swirls and Twirls, Canvas and Paper textures, Relief maps, Water and Glass distortions, and much much more! Now available - A comprehensive video tutorial that guides you through image processing with ImageFX 2.0. For upgrade information call 1-800-IMAGE-69 (804-282-1157). Print Support - Use the built-in support for RGB, CMY and CMYK color separations for your professional printing needs. Video Toaster User: "You need this program. Period."
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Grand *finale*

Regular as clockwork, Softwood have released the latest instalment of their award-winning word processor. But is Final Writer 5 a major update, or just another fine tuning? **Gareth Lofthouse** reviews...

You've got to hand it to them. Not only does Softwood continue to fight tooth and nail for domination of the Amiga applications market, it even has the gall to take on Mr Gates himself. Yes, Final Writer is about to challenge Microsoft's monolithic Word in a bid to make a serious dent in the lucrative world of PC word processing.

But before you bombard Softwood with letters of protest at their treacherous betrayal of the Amiga, take a moment to look at Final Writer 5. You might just be surprised.

Far from releasing an old product with a few tweaks to milk a dying market, Softwood has actually put Final Writer through one of the most substantial overhauls it's had in a while. With over 24 enhancements since release 4, this looks like the product of a company that remains very serious about Amiga-based development.

But first the basics (the majority of you who've heard this all before should skip the next two paragraphs). Final Writer has vied for the position of top Amiga word processor for years, and with good reason. A WYSIWYG product, it was one of the first to feature a user-friendly GUI complete with neat control icons and point-and-click requesters. In other words, it doesn't just work well, it looks good too.

Final Writer includes basic drawing tools to enhance and illustrate the content of your documents. More importantly, it's faster when it comes to manipulating, formatting and restructuring lengthy sections of text than arch-rival Digita Wordworth – and that after all is what a good WP is about.

Now on to the refinements introduced with release 5. First up, Final Writer now includes a new Auto Correct facility. As the name suggests, this will instantly correct your regular typos – thus *teh* will miraculously reappear as *the*, for example.

It's also possible to use this feature to automate repetitive phrases and lengthy names. If, for example, you were creating a tutorial for Final Writer 5, you could add an Auto Correct item to change *fw5* to *Final Writer Release 5*. Then whenever you typed *fw5* the program would correct it to produce *Final Writer Release 5*. More useful than it initially sounds, believe it or not.

Auto Correct will also capitalise the first letter of sentences and correct two initial capitals in a sentence.

Release 5 now allows you to create documents using a template. The 'New from Template' option doesn't just open your document, it updates the dates and times in the document and leaves the name set as Untitled. So what? This means you can't accidentally save a newly modified version of the document on top of your template, making it perfect for protecting and using templates for regularly used letterheads and forms.

Swapping between regularly used document formats is also made easier by a new option allowing you to save sets of style sheets and assign them to documents. In practice, this means you can have templates for different business letters, invoices, personal correspondence and so on, allowing you quickly to develop regularly needed document types.

Possibly the single most important innovation for serious WP users, however, will be the introduction of full featured, industrial strength RTF import and export filters. RTF is vital for users want-

TOP OF THE TABLE

It's been a long time coming, but at last Final Writer 5 allows you to create and incorporate tables into your documents.

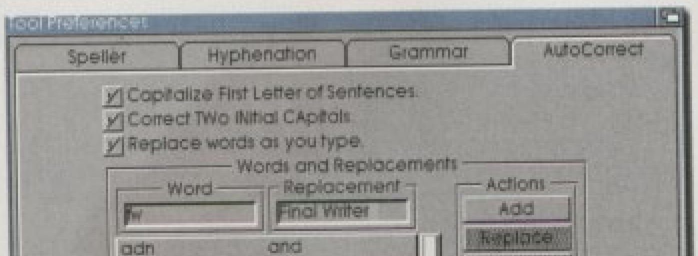
Tables are independent objects you can position anywhere. They are vital for documents where you need to present numerical data in a manageable and visually effective form – so much so that once you have them, you wonder how you did without them.

Still, better late than never, and Softwood have now done an excellent job by introducing an extremely versatile tables generator. The 'Tables Preferences' requester is a powerful tool, with all the options you're likely to need.

The 'text flow' option allows you to have the document's body text flow around the left of right of the table, or over the top of the table. A 'distance' option tells Final Writer how much space to leave between the table and the text flowing around it, while if you type in a title for your table in the 'Title' area, the table's title will be appended to the special Table of Illustrations section.

Tables can be customised with 16 background colours (useful for contrasting different columns or rows of data) and different thicknesses for the lines that divide the table up.

It's as simple as it sounds – and that's how it should be.



Following in the steps of Wordworth, Final Writer now includes and auto-correct facility

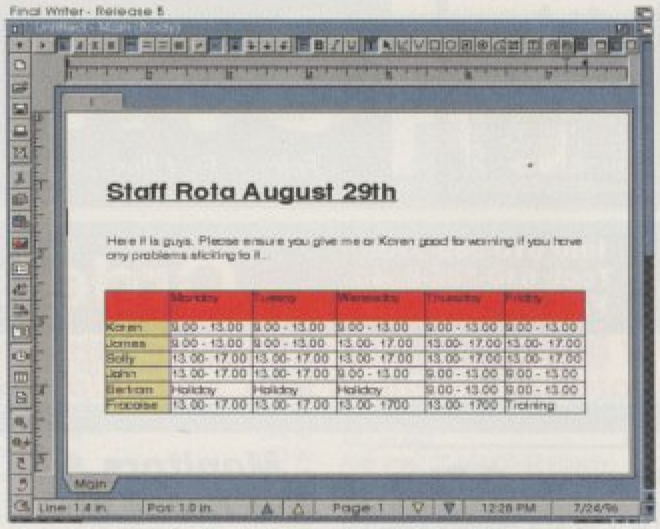
FIRST TO THE FINISH

Despite troublesome times in the Amiga market, both Digita and Softwood have continued to develop their products and release regular updates of their highly regarded word processors. The truth is, though, some previous product updates have been disappointing; expecting powerful new features, we have instead been presented with small refinements that are useful but uninspiring.

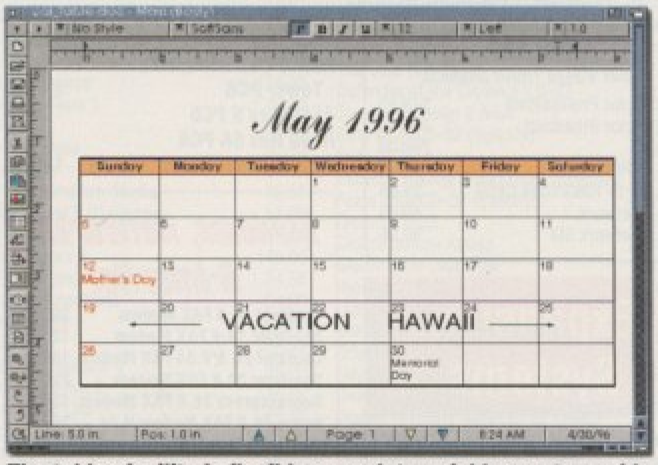
It's therefore heartening to see an Amiga product undergo a serious and substantial update that brings it up to speed with the sort of modern WP functionality we should expect.

It's even better to see it retaining an extremely affordable price tag for the home user.

Final Writer 5 is a big enough step forward to ensure that Softwood this time deserves an unqualified recommendation. Excellent.



Creating tables in Final Writer takes half a minute, even when adding colour enhancements



The tables facility is flexible enough to quickly create a wide range of objects that enhance and illustrate your data

ing to swap text documents between different WPs, and different platforms as well.

This means that you will be able to take a half-finished document from the PC at work and load it into Final Writer on your Amigas at home to finish it off. Then, providing you save it in RTF format, you can take the finished document and reload it on to the work PC the next day. (The same procedure will work with Apple Macs, and between all sorts of different WPs providing they support the RTF format).

Final Writer 5 is a big enough step forward to ensure that Softwood this time deserves an unqualified recommendation. Excellent.

Softwood have realised how increasingly important this feature will be and have ensured it complies with the latest RTF specifications. Furthermore, they've even made certain that RTF files using future specifications will load without problems. Even interchanging files with fonts that are non-existent on the Amiga (a common occurrence) is not a problem; Final Writer 5 will simply replace an unrecognised font with a preset Amiga font.

Other major enhancements include a high-calibre tables generator and an HTML export option for WWW pages (see our box outs). Improved data support for imported graphics is a boon as well, allowing you to import GIF, JPEG, BMP and other image file formats directly into a document.

Otherwise there are numerous small but useful tweakings to the WP's functionality, revealing a company that's in touch and prepared to respond to its customers requests. For example, Softwood had made the 'Open Font' requester available from the 'Type Specs' requester in Release 4. Thanks to requests from users, however, they've now made the 'Font' requester accessible directly from a menu item.

Again in response to customer requests, Release 5 also allows you to save sets of preferences and assign them to a document. This means you can save the current preferences using any name you wish.

Release 5 continues to enhance Final Writer capabilities for text manipulation too. In previous issues, re-arranging copy was a messy matter of manual cutting and pasting. Now, all sections can be arranged using the 'Arrange Sections' requester.

With the release of the surfer pack, more Amiga users are at last getting connected to the Internet – only to find that many sites use software applets that don't support their machines. Oh well...

Softwood's pro-active development of an on-line customer support service for Amiga owners is therefore particularly welcome. From July 1996, customers will be able to publish their own page on the Personal Web Site of Softwood's Server for 12 months. This facility, combined with the established Amiga News forum, should hopefully grow to become an invaluable resource for the exchange of information that's really relevant for Amiga owners.

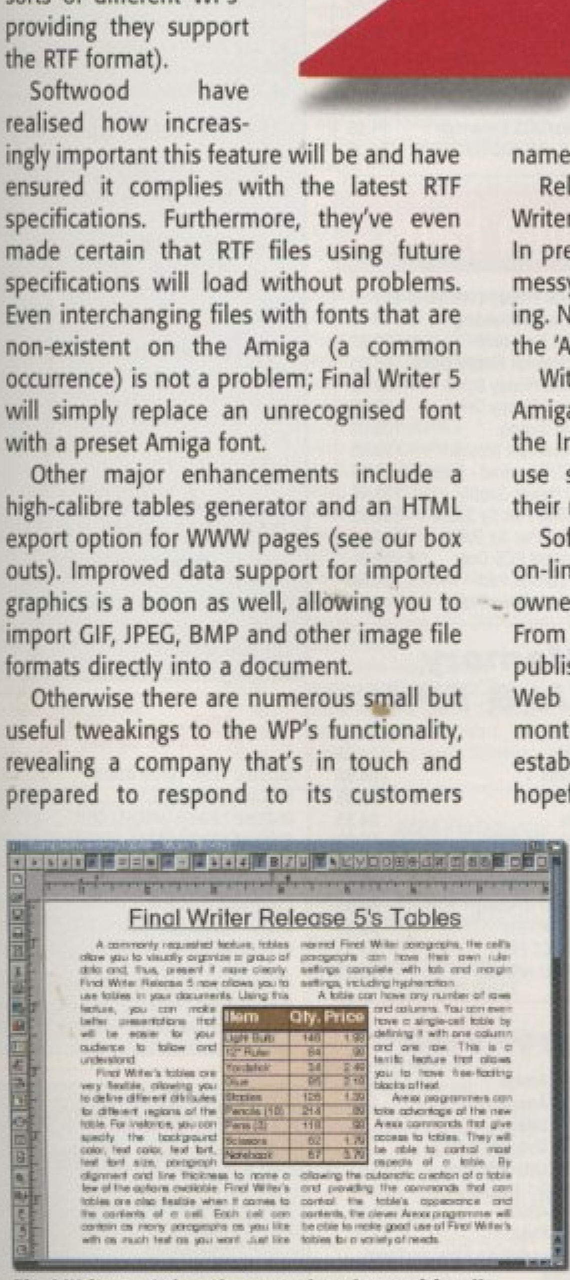
And here's the link with Final Writer. To participate, users are invited to send information for their home pages as a Final Writer document along with any other links and graphics – then Softwood promise to do the rest. You will be given the opportunity to update this information once a year.

A year's subscription to this service will cost you £35 – not too high a price for your own section of the Net, we think.

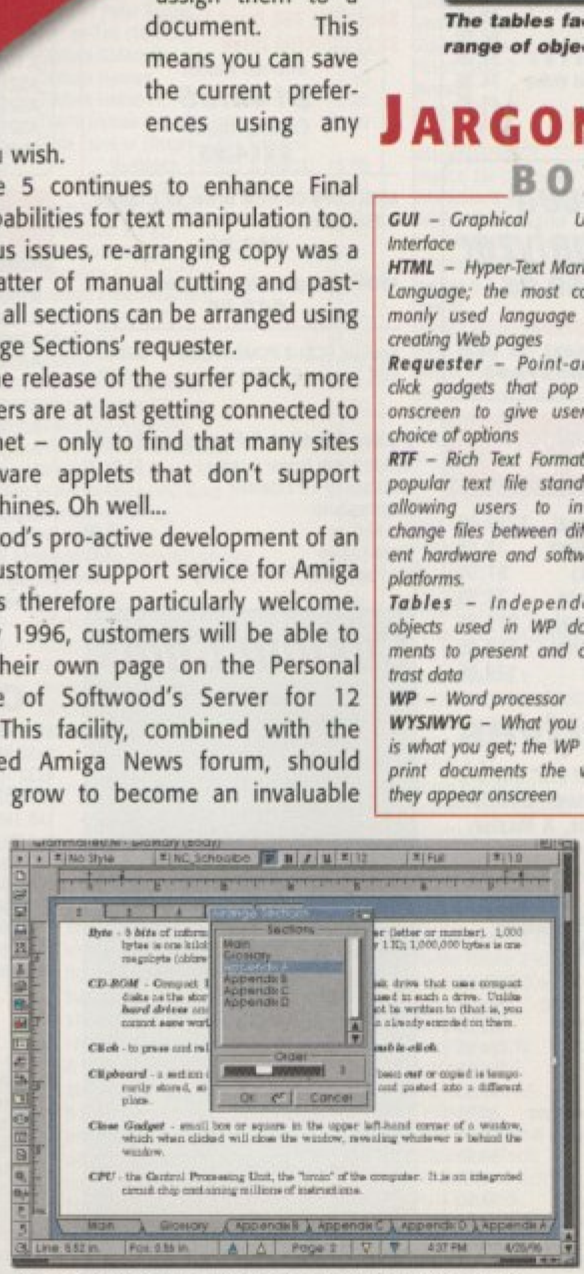
Final Writer 5 itself shows further commitment on Softwood's part for incorporating the WWW into their plans as well. Release 5 now includes an excellent HTML export option allowing users to create documents that can be used immediately on a Web site.

JARGON BOX

GUI – *Graphical User Interface*
HTML – *Hyper-Text Markup Language; the most commonly used language for creating Web pages*
Requester – *Point-and-click gadgets that pop up onscreen to give user a choice of options*
RTF – *Rich Text Format; a popular text file standard allowing users to interchange files between different hardware and software platforms.*
Tables – *Independent objects used in WP documents to present and contrast data*
WP – *Word processor*
WYSIWYG – *What you see is what you get; the WP will print documents the way they appear onscreen*



Final Writer retains the speed and user-friendly interface that have made it so popular


Manual cut and paste in large documents can be replaced by the new rearrange sections facility

Bottom line

PRODUCT DETAILS

Product	Final Writer Release 5
Supplier	Softwood Products Europe
Price	£74.95 (Upgrade £22.95)
Tel	01 773 836781

SCORES

Ease of use	88%
Implementation	94%
Value For Money	93%
Overall	81%

All sirens blazing

Siren Software's new Ultra CD-ROMs get the Amiga Computing test



Siren Software have been busy this month. Not only have they just released the Apollo Accelerators, but also this range of 'Ultra' CD-ROM Drives. Three variations are available to suit your needs and pocket and these are differentiated by their speed. The drives are available as either a four speed, six speed or an eight speed and are identical in all but this aspect. For the purpose of this review, we looked at the eight speed.

The range are all ATAPI/IDE external drives and come mounted in sturdy metal enclosures. What you get with each is a complete package that gets you up and running with your new CD-ROM drive in a relatively quick time. The drives plug onto the 44 pin IDE connector inside the computer and with the supplied software and cables you can configure your Amiga to support the ATAPI drive.

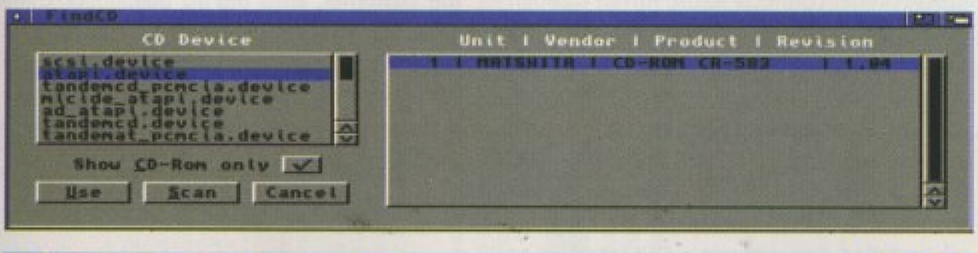
Depending on your workstation, you have the option of storing the CD-ROM drive either on its base or on its side. This is possible thanks to a simple but innovative feature of clips which hold the CD in position when in use. Unfortunately, a potential worry would be that if you are right handed then you may find the cables limiting the amount of room you have to manoeuvre your mouse. Although the cables are long enough to stretch across to the other side they are rather taut and interfere slightly with the keyboard. This potential problem can be eliminated however, by the ability to turn the drive onto its side which also gives you more storage space on your desk.

Siren have put quite a lot of thought into this product and have even provided a feature which will please those that are environmentally friendly. That is when the CD-ROM is not in use, it recognises this and shuts to a low power consumption mode.

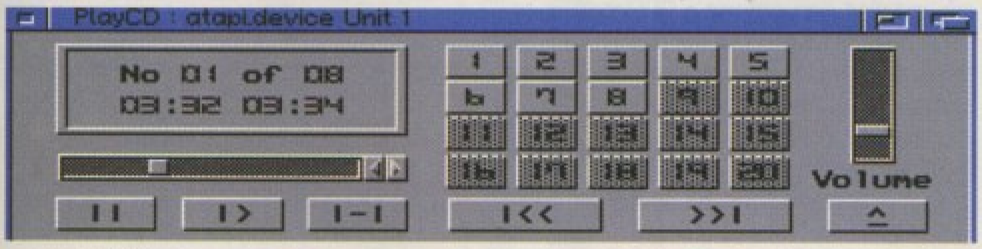
The drive also comes in handy as audio CD player. This means you can plug the device into your stereo through the audio output connectors and listen to a few of your favourite CD's. As you'd expect there is a headphone jack located on the front of the machine so you can listen to CD-ROMs without disturbing the whole office or house.

The volume for the headphones can be controlled via the control at the front. Otherwise control for the drive is via an onscreen bar which lets you slide the volume up or down. This can be shrunk into the title bar to keep your desktop as uncluttered as possible. Some may have preferred this if it was a commodity, however. The supplied software, IDE-fix, also acts as a CD32 emulator and allows the majority of CD32 titles to be used.

Although the drive is quite noisy in operation, it has an extremely fast accessing time as you'd expect from an eight speed. Siren are onto a winner with this collection of Ultra CD-ROM drives and it's great to see such a complete package which means you can get started without having to worry about purchasing additional parts. It's also good to have a device which leaves your other slots free for other uses. This option is considerably cheaper than purchasing a SCSI CD drive. Think about your needs though before you buy - if you can afford the eight or six speed, you will get extremely fast drives, although their four speed option may suffice for many Amiga owners needs.



The IDE-fix software allows you to get up and running quickly



The volume can be controlled via an onscreen icon

INSTALLER BASICS

The supplied package means that you have all the necessary software and cables to get the drive running. The process is quite fiddly though. Firstly you must unscrew the cover of the Amiga and remove the keyboard. Then find the IDE connector and if there is a hard drive, disconnect the cable that connects the hard drive to the IDE connector.

You must then remove the hard drive and plug the supplied cable into the Amigas IDE interface. If you have a two 2½" drive you will need to plug this into the second connection, if you have a three and a half, you use the three and a half inch. With me so far? You will then need to remove the floppy drive and the blanking plate at the back of the computer. This means you can now plug the CD-ROM drive into the connector which is an expansion board that fits into the slot at the back of the Amiga.

Finally, install the IDE-fix software and away you go. Although this is all quite fiddly, it is straightforward enough and means it leaves the PCMCIA and other ports free. It also ensures full compatibility with memory expansions and accelerators. However, it's worth mentioning that this procedure is not as convenient as using the Squirrel interface and a SCSI CD drive.

Bottom line

REQUIREMENTS

RED *essential* | **BLACK** *recommended*

A1200 — 2.04 Kickstart — Hard drive — 3.0 Kickstart (for CD32 emulator)

PRODUCT DETAILS

Product	Product: Ultra CD-ROM Drive	
Supplier		Siren software
Price	4 Speed	£169.99
	6 Speed	£199.99
	8 Speed	£239.99
Tel	Enquiry Line 0161 796 5279 Credit/Debit card orders (freephone) 0500 340548	

SCORES

Ease of use	75%
Implementation	88%
Value For Money	89%
Overall	90%

foto FUN

Jason Compton reviews Fargo's new colour printer



If you're old-school, the term 'printer' evokes mental images of noisy dot-matrix affairs which generated letters and envelopes (if you were lucky), with grainy, functional text. If you're new-school, the term 'printer' evokes mental images of whirring laser and inkjet printers which turn out fancy letterhead and smooth fonts. So the conventional wisdom goes.



At Fargo, printers aren't for agendas or schedules or boring letters in black and white. They're for colour, and lots of it. Fargo's Primera line sets standards for high-end professional applications, and is a favourite of computer dealers looking to convince people that computers are indispensible tools.

Fargo has now taken its experience and put it in a consumer-level product. The FotoFUN is a physically unimpressive device, a small white breadbin with only a couple of buttons and a slot on the front to make any difference. But inside is a dye-sublimation printer capable of turning out full-colour photographic-style prints of your favourite computer pictures in just about two minutes.

There are a number of techniques that can be used to get colour onto paper. The FotoFUN's dye-sublimation uses heat and a special cellophane-like ribbon to create living colours on a 4" x 6" piece of photographic paper specially supplied by Fargo. Each ribbon comes with 36 pieces of photo paper, and lasts just long enough to complete the set. There are no user-serviceable moving parts in the inside of the printer. The FotoFUN is a somewhat unusual printer in that it is not set up to accept a wide variety of media. Most printers, be they dot matrix, laser, or inkjet can accept different paper of different colours, along with envelopes and other paper products, but the FotoFUN exists solely to transfer photos and images from your computer onto film-type glossy paper.

The printer connects to the Amiga through the parallel port. There is an Amiga driver for the printer but, unfortunately, it is not shipped with the product. Instead, a program must be obtained from Fargo and paired with the special driver keyfile from the included PC driver disk. This is not exactly convenient, but it is worth the effort. Once your driver is properly installed, you can use a GUI interface to set certain preferences of the printer, such as the darkness of the final print and whether or not you want a clear protective layer added to the final photo. That taken care of, it is then ready for your images.

As mentioned before, the printer can handle 4" x 6" photo paper. To crop (make suitable for printing) a computer image can be frustrating sometimes. However, I recommend ImageFX because it also includes an expanded driver for the FotoFUN printer in version 2.6. If you don't have ImageFX 2.6, you can simply copy or save IFF images to the FotoFUN device created by the driver.

Each print sent through the FotoFUN takes about two minutes and costs roughly $1 for the customer, who has to buy ribbons and prints together for 36 individual cameras. This is a fairly expensive way to get photo-quality colour images, but the convenience of doing it from your home shouldn't be under-estimated.

MEANS AND WAYS

What's the printer good for? Well, if you have a scanner and want to alter images and re-print them, spending a little time in ImageFX or another image processing program and then outputting to the FotoFUN would be a good way to work. If you're a PhotoCD buff, you can use the FotoFUN to get 'hard copy' of some of your favourite pictures. Then there's the FotoMug kit, which allows you to create coffee mugs with any picture on them by baking a FotoFUN print onto a specially coated mug. It's actually fairly inexpensive to do and takes only 15 minutes in the oven. Or, if you're a postcard buff, Fargo can provide you with special postcard print paper so you can create your own message.

The FotoFUN isn't for everyone – it's pretty much a one-track mind device. However, it's a neat device and certainly worth a look if you think you might need colour printing for your archives, presentations, or business.

Bottom line

PRODUCT DETAILS

Product	FotoFUN
Supplier	Fargo Electronics
Price	$499 ARP
Tel	Phone: 001 612 941 9470 (US readers 1 800 327 4622) Fax: 001 612 941 7836

SCORES

Ease of use	70%
Implementation	90%
Value For Money	85%
Overall	85%

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It's been a bumper postbag this month for **Ezra Surf,** with letters pouring in from all corners of the **world**. Many different subjects, from budget games to faster processors, have provoked you into putting **pen to paper**, so take a moment to peruse what your fellow readers think

esp



Got something you need to get off your chest? Want to share some handy hints with other readers? Simply put pen to paper and write to Ezra Surf's Postbag, Amiga Computing, IDG Media, Media House, Adlington Park, Macclesfield, Cheshire, SK10 4NP. There's £50 up for grabs for our star letter.

AMIGADOS – ALIVE AND KICKING

As a dedicated fan of 'Amiga Computing' and things Amiga, it is interesting to both read and hear about other people's point of view, particularly our friends across the water, as they invariably see things differently from 'us'.

Several of your correspondents had some interesting and sometimes valid viewpoints, but I am not letting them get away with some of the points made. To make things easy, I'll list the ones I disagree with in more or less the order in which they appeared in 'Postbag'.

'Dying but not Dead?' - I can see the logic of his reasoning, but it totally ignores the vast number of people world-wide who like AmigaDOS and wouldn't give up their Amiga whatever happened as far as other formats were concerned. Furthermore, most of 'us' are ready, willing and able to spend money to get what they want out of their Amiga, which leads me nicely on to the next point.

The Americans are talking crap when they want an upmarket machine for nowt, as we say in Yorkshire, and in saying that a cheap machine would certainly sell in America. Which planet do they live on? Several of the American PC makers are planning to flood the European market with what I would describe as 'downmarket PCs' – the equivalent of 486/586 pre-Pentiums, because they cannot sell them over there in the saturated market!

Like most people our side of the water, I came to the Amiga when I acquired, quite late on, an Amiga 500. It was a brilliant games machine, and although much better made than the later 600 and 1200, its design limitations did not lend itself as well to expansion as the 1200. Being entirely fair to the 1200, it was never really designed as a big box Amiga; that slot was filled by Amiga with the 4000. As an aside, I am still kicking myself for not taking out a loan to buy the second-hand 4000 that I could have had for just over £1000 after Commodore went bust. But it is no use crying over spilt milk now, because at the time I couldn't afford it. Subsequently I spent considerably more than that upgrading my 1200 to where it is at now: Seagate 1.1 Gig hard drive inside, Blizzard 1230/4 accelerator and SCSI board and outlet with a 16Mb SIMM giving me 18 Mb RAM. It is, I suppose, still technically a stand-alone machine, in that I could if I wished take it to another place and run it fairly easily, but in practice I have it connected to a HiQ Powerstation – it has on-board my CD-ROM, separate stereo speakers and room to add several other things to the SCSI chain if I wish. It provides power for my Project II printer and I use my Zip drive for back-up.

Alright, it has cost me close to the price of a quite reasonable PC, but I **chose** the Amiga because I **prefer** it to the PC and it does almost everything I ask of it. That it cannot yet do is entirely down to my lack of expertise, not AmigaDOS!

When Escom bought out what was left of Commodore you will remember I wrote saying that I thought Escom was a disaster. When I heard that VIScorp was taking over from Escom, I felt considerable relief. At last, here was a firm, as I understood it, with limited resources, but which knew what it wanted the Amiga for. Hopefully it would even be prepared to license the technology and carry it forward.

Companies like PIOS will help pursue a brighter future for the Amiga

This is already happening. Phase 5, who made my Blizzard board, has already announced that the new PowerPC is in development, and that it will be backwardly compatible with AmigaDos 3.0+! Similarly, John Smith has joined the new PIOS company together with several other Amiga aficionados like Dave Haynie and Andy Finkel, and will be developing a computer based on the PowerPC with an operating system 'similar to the Amiga OS' – quotes courtesy of this month's Amiga Computing!

If I had either a 500 or 600, I wouldn't be looking to go over to a PC. I should be snapping up one of the many 1200 bargains to be currently had – in our local paper the other day there was a 1200 with hard drive and a Commodore monitor for just over £200!

Your prize letter this month was well aimed at the games companies, and I would only add that it is a shame somebody doesn't start transferring some of the older Amiga games over to a budget-priced CD-ROM, like the ones currently available on PC at around £12.99. I am sure there is a ready market – I for one would jump at the chance of buying several of the classics on a CD. Think of all the hassle it would save trying to install games on your hard drive.

That's enough rabbiting from me for now, although I don't promise not to bring you some more in the bright Amiga future!

Ian Aisbitt, North Yorkshire

Ah, a regular contributor to our postbag, I see. You mention the availability of second-hand Amigas and I think this is definitely a small but significant step forward, at least for the time being. This provides a very cheap way of buying an entry level computer and then upgrading it to suit your needs. The only problem with this is that the number of people opting for second-hand machines won't be recorded, hence development companies won't see an increase in Amiga owners – until they start buying new hardware and software.

A budget CD-Rom sounds like an excellent idea. I'm sure many Amiga owners who either missed the game first time round or don't want to have to mess around installing disks would snap them up. As far as we know, no plans are on the cards – apart from the usual budget releases on disk. But who knows? Some nice big publisher out there might take notice of our humble column....

US EDITION PROBLEMS

First off I would like to say you have an outstanding publication and it has made my turmoil over the death of Amiga World here in the US extremely bearable. Okay, now that I've buttered you up with accolades, here is a complaint (you knew one was coming)...

Delivery of Amiga Computing US edition here in the States is extremely slow, and always late with regard to any pertinent information in your magazine. I was looking forward to purchasing StormC at the special Amiga Computing reader price, but unfortunately the offer expired May 29 and I did not receive my magazine until May 30! I don't know how publications in the UK are scheduled, but here in the US all next month magazines are sent out before the end of the previous month.

In this way readers receive the May edition before May has turned into June. Is mail really that bad? Over 30 days? I assumed since Amiga Computing was an IDG publication that the US edition was printed here in the US. Am I wrong? Amiga World was also an IDG property but it was always on time.

Thank you for your time.

James Vigliotti, USA

Do not fear. We have sorted this out and apologise for the problems you've had in the past. The way it will work in the future (from this magazine onwards) is that everyone – including our American subscribers – will receive an International edition. This is because Amiga Computing and Amiga Computing US have merged to produce an even stronger title.

The advantage for you is that you will get the magazine at the same time as our UK readers. Plus, you get a bigger magazine both in terms of editorial content and actual size (English A4). So hopefully this will keep readers on both sides of the pond happy as we strive to bring you the latest news and developments from the Amiga world.



Our US subscribers will no longer receive a specific US edition. Amiga Computing and Amiga Computing US have merged to produce a stronger magazine

I WANT IT ALL

Why can't we have it all? Ever since the late Jay Miner and Amiga, Inc. developed our beloved machine, it has been looked on as a computer that has always been years ahead of its time. My personal view is that the Amiga operating system is fast and efficient, and the system architecture is still envied by many computer developers who try to mimic its functions with system boards and chips (ie video, audio, and I/O). But the one thing that has been a great disappointment for the Amiga is its processor, the heart of the machine.

I do not understand why the fastest processors ever created have still not been incorporated into the Amiga (ie PowerPC or DEC). IBM users are now playing games on 133 MHz Pentium Ultimate Gaming PCs. These processors are 20+ times faster than the average 030-based Amiga. Serious Amiga users like myself (A1200, 68060, 18Mb RAM) are forced to incorporate IBM compatible DECs, MIPS, and Pentium Pro workstations into our work areas.

What I believe many Amiga users want is an Amiga, with its powerful operating system and custom chip set, combined with a processor that runs around 300 MIPS (million instructions per second), all in one box. Amiga third-party developers have believed this, but for some unknown reason it has always been the corporate owners of the Amiga who have seen differently.

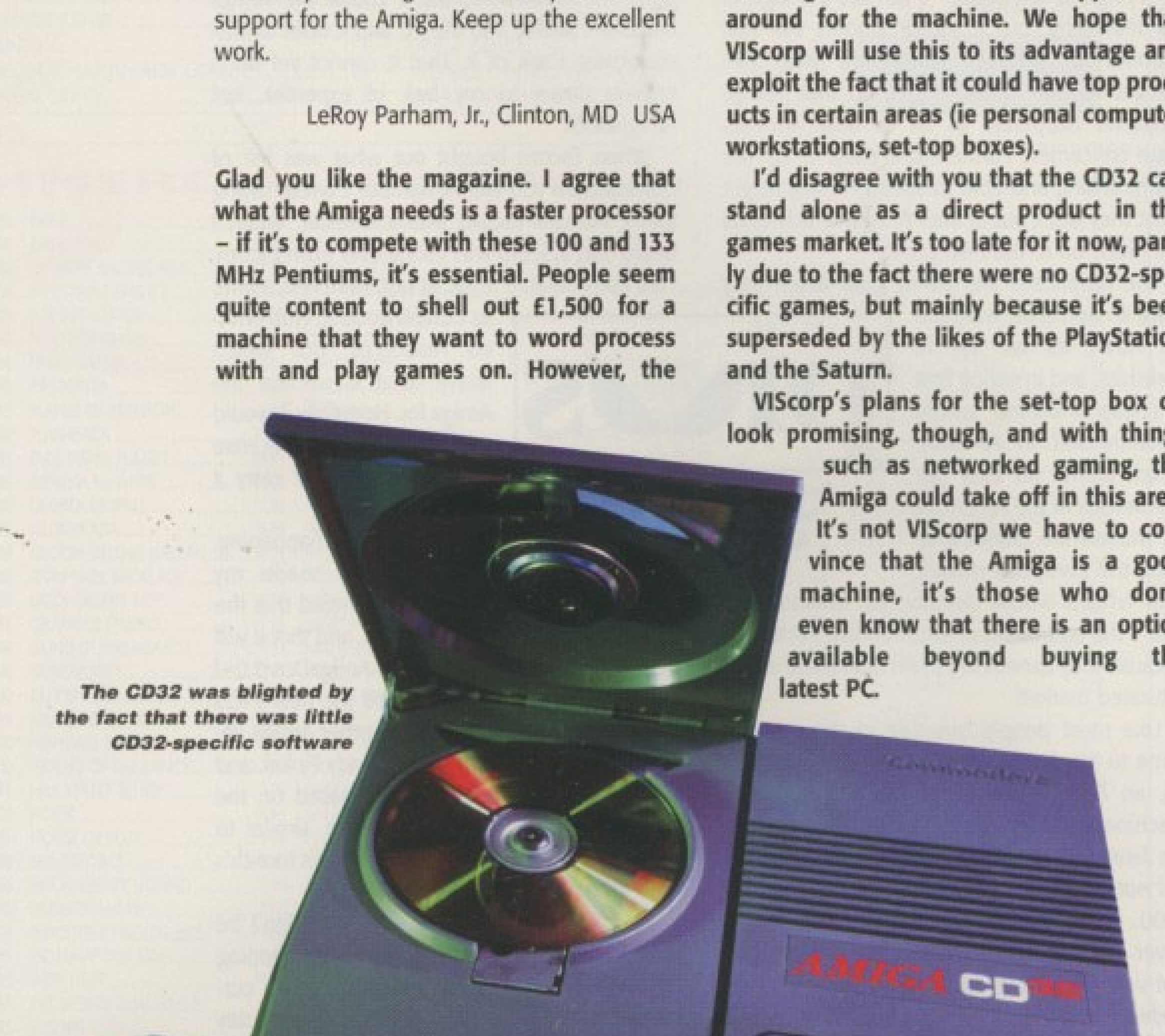
The Amiga community is unique in that it can easily stand alone in this vast computer industry. VIScorp, with proper planning, industry co-operation and development, could be the only computer company with direct products in three of the now top computer areas: gaming (CD32), personal computer workstations (A1200, A4000T), and cable set-top boxes (ED). Amiga Computing, I love your magazine and your world support for the Amiga. Keep up the excellent work.

LeRoy Parham, Jr., Clinton, MD USA

Glad you like the magazine. I agree that what the Amiga needs is a faster processor – if it's to compete with these 100 and 133 MHz Pentiums, it's essential. People seem quite content to shell out £1,500 for a machine that they want to word process with and play games on. However, the Amiga community is still strong, and it's amazing to see the wealth of support still around for the machine. We hope that VIScorp will use this to its advantage and exploit the fact that it could have top products in certain areas (ie personal computer workstations, set-top boxes).

I'd disagree with you that the CD32 can stand alone as a direct product in the games market. It's too late for it now, partly due to the fact there were no CD32-specific games, but mainly because it's been superseded by the likes of the PlayStation and the Saturn.

VIScorp's plans for the set-top box do look promising, though, and with things such as networked gaming, the Amiga could take off in this area. It's not VIScorp we have to convince that the Amiga is a good machine, it's those who don't even know that there is an option available beyond buying the latest PC.



The CD32 was blighted by the fact that there was little CD32-specific software

LETTER FROM THE LAND OF THE VIKINGS

First I would like to say congratulations on your growing readership. Before 1995 I almost never bought your magazine. In fact I only have three from before 95. Now I buy Amiga Computing every month. I especially like your reviews of serious software and the news and reviews of different companies who use the Amiga. Why haven't you covered Phase 5 and MacroSystems yet?

Second, I would say that I don't like your game reviews. Not because of your writing but because of the bad games you review. I believe that you should only review games with extremely good graphics or gameplay. A good example of a game with graphics is Breathless, and for good gameplay, Sensible Soccer gets my first place. The others are mostly junk. When some PC friends of mine look at the games section in my Amiga Computing (and all the other Amiga mags) they all wonder if the magazines are from the end of the '80's. The Amiga games these days don't exactly strengthen the Amiga's position in the home computer market.

Every second month or so there are some Amiga users from the UK who complain about the price of Amiga Computing. Next time you even think of complaining about the price, remember that all the Norwegian readers, including myself, pay £8 for Amiga Computing with a smile on our faces.

I would also like to encourage all Amiga owners to buy as much software and hardware for your Amiga as possible. About two-and-a-half years ago I bought my Amiga 4000/030 bundled with ScalaMM210, a 260Mb hard drive, 10Mb of RAM and the VLab Y/C card for 23000 Norwegian krones (that's about £2300). And, after I got a job last year, I have bought CyberStorm060, CyberVision 64 (4Mb version), 540Mb hard drive, 1.3 Gb hard drive, two 4Mb RAM chips, one 8Mb RAM chip, MicroVitec 1438, Oktagon SCSI-2 controller, ZIP drive, Photogenics 2 and Cinema 4D v2.1. And I haven't finished buying yet! You may think that I am rich because I have bought all this, but I'm not. I only earn about £180 a month and take small jobs when I have time – last summer I earned £400 by writing procedures on my A4000! In the short time I have had my A4000 I have spent £2500!

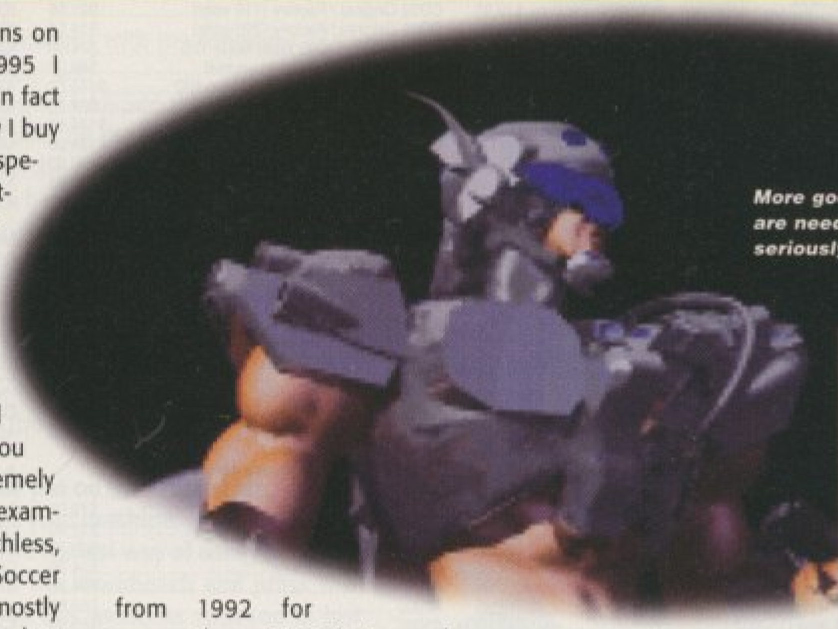
Finally, I would like to encourage all the readers of Amiga Computing to save up some money so we – all the Amiga users – can buy the PowerPC Amigas that Phase 5 is making for 1997. But don't forget to buy Amiga products in the meantime. Phase 5 and MacroSystems seem to be the only hardware-related firms who really do something with the Amiga these days. New Amigas should have at least an 040, not a slow 030 which seems to be the processor chosen by AT for the 'Walker'.

Also, the current price of the A4000T is way too high. Who wants to buy technology from 1992 for more than £2000? I surely wouldn't have paid that much for a machine that old if I were to buy a new computer today. The only reason for me staying with the Amiga today is the OS and the real Plug and Play. The only OS which can almost compete with AmigaDOS is System 7 on the Mac, but the software on the Mac is extremely expensive compared to software on the Amiga.

What should the future Amigas be like? Take a look at Phase 5's Internet pages and read the configurations for the Power PC Amigas. This is the kind of Amiga system I would gladly pay for in 1997. If 1600 x1200 pixels at 24-bit colour depth and a refresh rate of 72Hz seems too good to be true, check out Phase 5 on the Internet.

To all Amiga users: Keep on supporting the Amiga. It is the only computer with a user-friendly approach and has the fastest and best written OS on the Earth today. Any comments?...

Ole Haugland, Norway



More good-looking games like Breathless are needed if the Amiga is to be taken seriously as a games platform again





I'm glad you have seen the error of your ways and decided to buy the magazine monthly. And at £8 – well, Amiga Computing is priceless isn't it? Who can put a value on all the helpful reviews, previews and tutorials we have? It saves you money in the long run because you only buy the products that are worthwhile. Anyway, enough of this blatant self-promotion.

To address your other points. Firstly, we will be featuring MacroSystems and Phase 5's current projects in the very near future. We would not neglect such important issues but we want to make sure we can give you proper, in-depth articles on them.

Secondly, I agree with your comments about the Amiga games market. However, I'd like to point out that we do try our best to review the better games rather than fill the section with useless titles that nobody would buy, but with the current situation it gets harder and harder to fill System. It sometimes becomes necessary to show some of the less than perfect titles just to give you an idea of what is available. Despite this, we are far less guilty than other magazines of taking up pages with these kind of games. Instead, we leave it in Andy Maddock's capable hands to find other ways of filling the section. For example, we bring you helpful cheat modes or features on games companies, which I'm sure our readers find more interesting than reviews of poor games.

Also, what you say about the A4000's is true – only real enthusiasts will want to purchase the machines at these prices. You're very enthusiastic about what Phase 5 will have to offer in the future. We too hope that it can revitalise the market with the impressive PowerPC project.



If you prefer, you can send us your letter via Email. Simply point your mailer to: ESP@acomp.demon.co.uk. You could even send it in on a disk – it makes our lives easier too. Someone has to type this lot in you know!

BITS AND BATS

I have recently had one or two problems with my computer and I would be immensely grateful if you could help out.

1. The other day I dropped the shell icon into the Workbench partition of my hard disk, but I cannot get it back on the main Workbench background screen. I have tried Snapshot All from the Workbench menu bar, but it does not seem to work. Could my Magic Workbench be anything to do with this?

2. I read that SCSI hard drives are supposed to be faster than the IDE equivalent. Your review said that my Seagate drive is IDE, but Sysinfo says that it is SCSI. Why is this?

3. When reading the speed of my hard drive using Sysinfo with my Blizzard 1230 disabled, the transfer rate is always between 1.4Mb and 1.5Mb per second. But when I use the Blizzard, currently with no Ram, these figures drop to just above 1.2Mb. Will this change when I get more memory? Has this anything to do with the low speed ratings you gave it in your review? I used to have the Blizzard 1220 accelerator and the speed was 2.5Mb per second.

Craig Humphries, Fosdyke

1. If you want an icon to stay put on the Workbench and reappear in the same place each time you reboot your machine, you need to use the *Leave out* option in the icon menu. The easiest way of using this is to select the icon you want 'left out' on the Workbench and press the right Amiga and L keys. The reason this works as opposed to just dragging the icon onto the Workbench is because the *Leave out* function creates an extra file called *.backdrop,* in which there is a list of the files that should be left out. Each time Workbench starts, it reads this file - that is on the root of each drive - and will place any file found listed in there out on the Workbench.

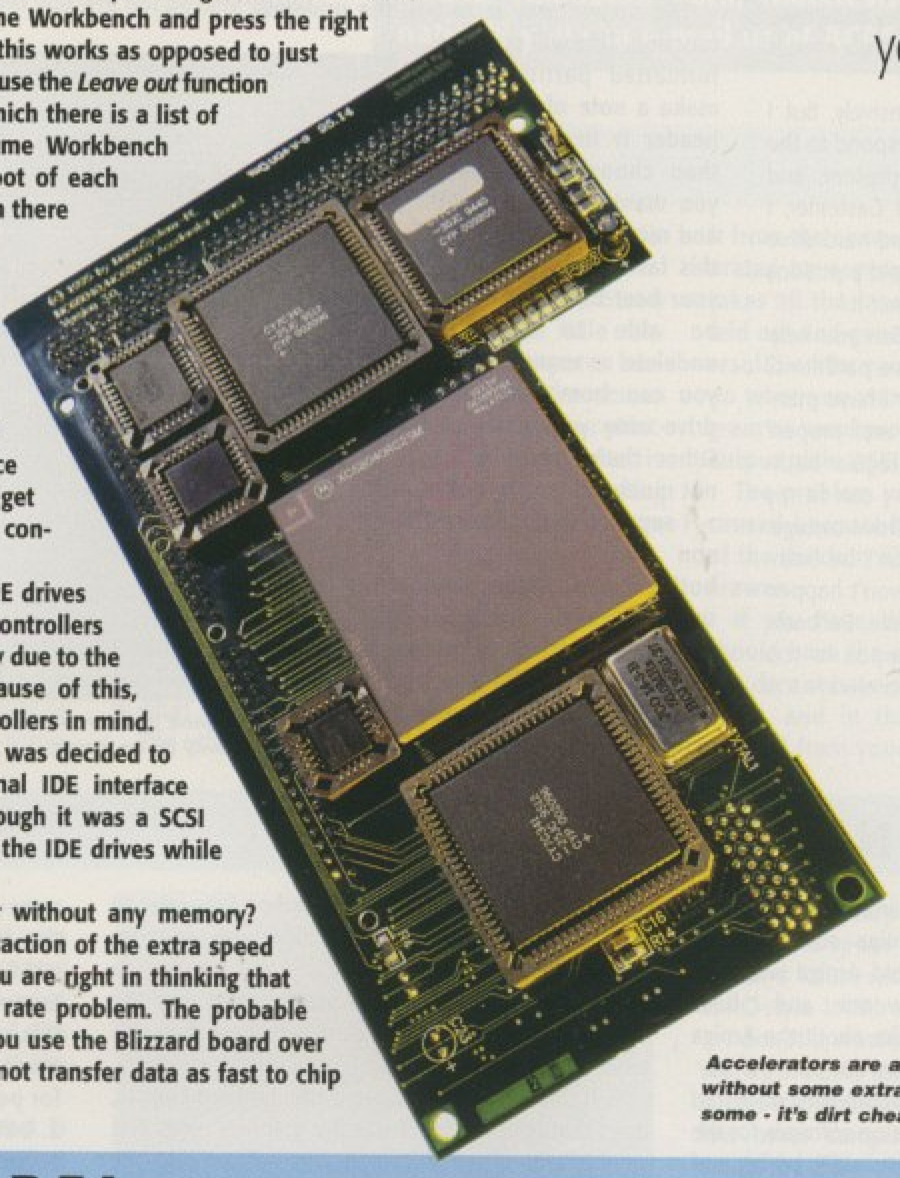
2. Generally it is taken that a good SCSI 2 hard drive and controller will produce better results than an equivalent IDE drive. Good transfer rates for an IDE drive will be around 2-3Mb/s, while a fast SCSI 2 controller, such as the one found on the G-Force accelerator, will produce results at double this speed. The speed you get back does rely greatly on the speed of the controller, processor and the hard drive itself.

Before the A600 and A1200 came out, IDE drives on the Amiga were fairly rare, with SCSI controllers and hard drives much more in favour, mainly due to the extra flexibility of the SCSI interface. Because of this, Amiga software was written with SCSI controllers in mind. So, when the A600 and A1200 came out, it was decided to make things more compatible. The internal IDE interface would therefore appear to software as though it was a SCSI interface, thus enabling software to access the IDE drives while being unaware of the different interface.

3. Why have you bought an accelerator without any memory? Without extra memory you will only get a fraction of the extra speed of which your new processor is capable. You are right in thinking that getting fast memory will cure the transfer rate problem. The probable cause of the drop in transfer speed when you use the Blizzard board over the A1200's built-in processor is that it cannot transfer data as fast to chip memory.

acas – amiga computing advice service

Fear not if your **Amiga** is on the blink. **ACAS** will sort you out and send you on your way with a cheery wave



Accelerators are almost useless without some extra memory. So get some - it's dirt cheap at the moment

A600 SQUIRREL

I need some technical help with installing a squirrel SCSI interface and a Reno Portable drive to an A600. I have installed the Squirrel software several times using different configurations but the CD-ROM icon will not show on the screen.

I have changed devices and unit numbers on the tool types of the CD0 DOS driver. I have also tried a different CD-ROM drive and a second mother board without success. I finally sent the Squirrel back to the company to check it out.

1. Do you know of anyone who has been able to set up an A600 with a CD-ROM drive via the Squirrel

2. Can a CD-ROM be connected up to the parallel port using the SCSI cable that comes with the drive?

3. If so can the Squirrel software be modified for a parallel port usage or do I need other software?

Anthony Whiteman, New York

As far as I know the Squirrel should work fine with either the A600 or the A1200, but it does seem strange that you are having so much trouble getting your Amiga to recognise the CD-ROM drive as the Squirrel install software is very straight forward to use.

Normally the most common reason for a PC-Slot device not working is that some of the pins on the interface have become bent out of shape. This is easily done if you try to insert an interface at a slight angle as the end pins can end up being pushed down out of the way. If you get a jewellers screw drive and a torch with a little bit of care you can realign these pins.

Other than that the best way to see if the SCSI interface is working is to use SCSImounter which comes with the Squirrel. If when the CD-ROM is connected SCSI mounter just returns errors then there is definitely something wrong with the interface.

To answer your last two questions there is no way you can get the Squirrel software to work with the parallel port. It is theoretically possible to use the parallel port, but it would be so slow there would be little point.

THE HARD WAY

I purchased a Syquest EZ135 drive and an Oktagon SCSI card from Gasteiner at THE computer show at the Novatel hotel and had a lot of problems in getting my Amiga 4000/030 to recognise it. It was all very hit-and-miss.

During one of the times when it 'hit', like a Person Rapidly Approaching Termination Time or PRATT for short, I inadvertently formatted my internal hard disk using the Oktagon preference program. And yes, you've guessed, it the only back-ups I had were of my Workbench partition. Oh woe is me, and thrice woe at that!

However, as it only took a few seconds to format, I am assuming that all it did was a quick format. So, whilst all the files and drawers are there, on boot-up the system cannot find the various partitions.

I have tried DiskSalv 2 extensively, but I find that file names do not correspond to the actual contents of the file. At present, and with many thanks to Darren at Gasteiner, I am using the EZ drive as a second hard drive until such time as I can get my old partitions back, or at worst have to re-format it.

Now the burning question: Can you help me get the system to 'find' these partitions? Is it possible that using DiskSalv I have managed to mess things up good and proper? And finally, yes I will be making regular back-ups in the future, especially as I can fit my 120Mb hard drive onto one EZ-Drive cartage. Let this be a lesson to the 'I can't be bothered, I haven't got the time, it won't happen to me, I'll do it tomorrow' brigade. Be bothered, make the time, it will happen to you and tomorrow never comes. It is always too late!

S Mallion, East Sussex

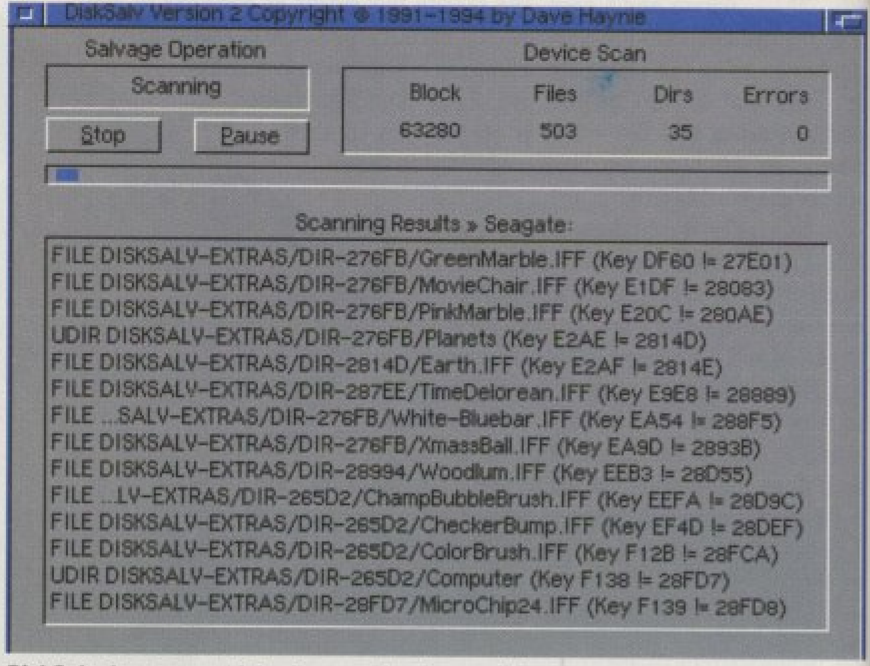
There is nothing worse than accidentally formatting your hard drive. On the whole, DiskSalv does a good job of recovering deleted files, and there are two approaches to using it in your situation:

You can use DiskSalv's unformat function. This will try to resurrect your hard drive in its original state with all your files where they were to begin with. Unfortunately, it has the best chance of success if you have not used the hard drive since the format, as any writes to it would have disturbed the original files and DiskSalv will not be able to do as good a job.

The second way is to use the undelete function. This will scan the formatted partition and make a note of every file header it finds. You can then choose which files you want DiskSalv to try and recover. I would think this last option would be your best bet, as you will be able to try and undelete as many files as you can from your hard drive onto your EZ drive. Other than this there is not much left you can do.

I suppose the main reason that people don't bother properly backing up their hard drives is laziness. The first time you back-up your entire hard drive can take a good while, even for a small-ish drive, but once it is done, next time you will only have to deal with the new files. Therefore the amount of time you have to wait is only a fraction of what you would think.

In fact you don't really have to wait around at all. As the Amiga multi-tasks you can have you back-up program running on a low task priority in the background while you get on and do something else. Also, if you have a large program such as Final Writer, all you really need to back-up are any document files. In this way, if you do lose the copy on your hard drive, you can just re-install Final Writer then restore your documents from your back-up.



DiskSalv does a good job of recovering damaged files, but it can only do so much

QUESTIONS QUESTIONS

I am a computer programmer who is relatively new to the Amiga computer. My brother gave me his old Amiga when he bought himself a new one, and I have found a lot of things I like about the Amiga compared with the PCs I use every day at my work.

My Amiga is an A500 with a 120Mb hard drive and 9Mb of Ram. I would like to develop software for the Amiga but I find the manuals I have dry, boring and difficult to read and understand. Also, they do not really address the question I have about the Amiga. As I find you do a pretty good job of explaining the Amiga to those who write to you, I am listing the questions I have:

1. Why don't most Amigas use SVGA monitors with none-interlaced screens?

2. What is a DMA?

3. Why can the Amiga multi-task while a PC cannot?

4. What is it that allows the Amiga to have such terrific handling of bitmap colours when compared to a PC? I have to work on PCs at work and I find that if I look at a bitmap image close up, colours like orange are just a bunch of red and yellow dots, whereas on my Amiga, orange is orange with a nearly infinite number of shades and hues.

5. What are you talking about when you refer to the future Amigas new custom chipsets? Have these new chips been developed, or are you referring to existing chips that could be incorporated into the new Amiga? If these chips exist, what are they and what are they used in now?

6. If the future Amigas use a standardised chipset, does that mean it could use the graphics cards and sound cards of the PC? What would that do to the colours the Amiga displays now?

7. Why does the Amiga have a different method of writing to floppy disks than PCs? What is the possibility that the new Amigas will use the new floppy drives developed by 3M that can pack 120Mb of data on their 3.5" floppies?

8. The Workbench looks so plain with all the drawers the same and everything different shades of grey. I am used to having lots of colour and many different icons on the PC, and I would like to change the colour scheme and icons on the Workbench. Is there anything out there that would help me do that?

Ken Haigh, St. Jacob USA

1. Well, for any AGA Amiga or big box Amiga with a graphics card, there is no real reason why they cannot use an SVGA monitor and high resolution none-interlaced screens. Traditionally, however, the Amiga main display has been either PAL or NTSC, which are the standard TV displays used in Europe, America, Japan and Australia. Because of this, most Amiga software is geared towards these display modes and there is no real incentive for people to use VGA monitors.

2. DMA refers to the ability of a device or chip to access the computer's memory independently of the processor, and stands for Direct Memory Access. A device that can perform DMA has the advantage of freeing up processor time, but there is the possible problem that it can stop the processor from accessing memory. One thing that made the Amiga special when it originally came out was that all its custom chips could perform DMA, and so work independently of the processor.

3. The Amiga can multi-task due to its operating system. When ever you run a program, the operating system add this to its list of all programs running, and when it asks for processor time, the operating system will 'share out' the total processor time between all the programs that request it. With the advent of Windows 95 the PC can now multi-task, even though the system requirements

POINTLESS PRINTER

I have recently purchased a Commodore IP3300 colour printer to go with my Amiga 600. However, I do not know which printer driver to use when using Wordworth v1.2, as there isn't one listed for this model and any I have tried result in the printer going berserk! Could you please help?

D Burdey, County Durham

I suppose you could be excused from thinking a Commodore printer would work with an ex-Commodore product, but you should never really buy any hardware unless you know you have the correct software to use it.

The worst offenders for this type of thing are printers. Unless you know you have a correct printer driver, the chances are the printer is not going to work. And if it is not one of the well known makes, you are asking for trouble.

As for getting the printer to work, I have to say things do not look too hopeful. Most printers come with Epson compatibility, which may allow you to print out using black and white output and grey scale graphics. But unless you can get a specific printer driver you will not be able to use the colour side of the printer at all. Sorry.

acas

Do you have a problem? Do you sometimes find yourself poised over your Amiga with axe in hand, spouting profanity at the stubborn refusal of your software or hardware to behave in the correct manner?

Well, calm down and swap the axe for pen and paper, jot down your problems, along with a description of your Amiga setup, and send it off to Amiga Computing Advice Service, IDG Media, Media House, Adlington Park, Macclesfield SK10 4NP. Alternatively you can e-mail us at ACAS@acomp.demon.co.uk

NO FONTS

I have an Amiga 600 with an extra 1Mb of memory, plus an external drive and an Epson FX-100 printer. My problem is not being able to use the fonts. I can display and use them on-screen, but cannot get any to print out other than the default type.

I have installed the printer as per the book and that appears to be satisfactory. Using Shell I can display any font I want by typing 'setfont name size prop'. This then displays the named font. If I then type 'copy * to prt:' followed by a message, this only copies to the printer in Topaz.

What am I doing wrong? Also, trying to use Fountain, I get a message 'unable to open diskfont.library'. Clicking OK leaves me with no further moves to make. I have a feeling that I should be putting a tool type in somewhere. Or is there something else I should have done? I would appreciate a little help and advice.

G E Baily, Surrey

You seem to be getting a little confused with how the computer handles what appears on the screen and how this data gets to your printer. In the Shell it does not matter in what font the text appears, as the only data being sent to the printer is the ASCII characters you are typing.

Low end printers will generate printouts in two ways. One is by using 'built-in' printer fonts. Most printers have a couple of sets of printer fonts that can be used, but the output you get is still basically what a typewriter would give you.

The other way is by printing a 'bitmap' passed to it from the computer. This bitmap has to be generated by a program such as Wordworth. This takes all the fancy fonts and graphics you have laid out and generates the bitmap at the correct resolution for your printer. The only way you can do what you want is to either use a paint program or word processor; the Shell will only ever output plain ASCII.

The problem you are having with Fountain is caused because it needs a more recent version of the diskfont library that is found in your libs drawer.

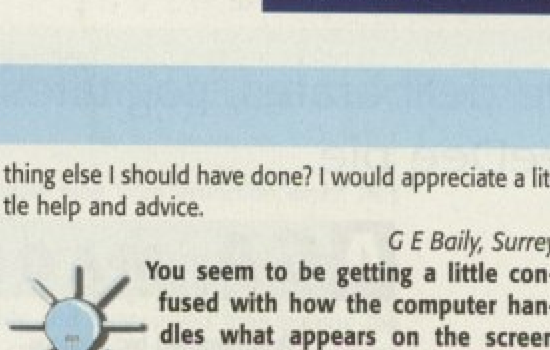
If you have Workbench 2.04 or higher you should have the correct version. It could be that you do not have any version on the disk you are using, and in this case you should copy the original from your Workbench disk.

are four times what the Amiga uses.

4. I think you will find any picture displayed on a monitor or TV is made up of tiny red, green and blue dots. How visible they are depends on what is being displayed, the display itself and the screen resolution. Essentially, the display of the PC and Amiga are the same.

5. Basically, all the current Amigas use what is known as a custom chipset. This refers to the fact that the display, sound and other parts of the Amiga are handled by chips unique to the Amiga. When the Amiga originally appeared 10 years ago, these chips were what made the Amiga so much more powerful than any thing else at that time. Because of this, certain Amiga owners have a fanatical belief that any new Amiga absolutely *must* have a new custom chipset otherwise it is not really an Amiga.

Time moves on and now huge corporations have large teams of engineers with huge budgets developing graphics and sound cards for the PC. Anybody now hoping to develop a new chipset would have to compete against these companies. Basically, the time and effort required is just not worth it. It is far more effective to buy cheap, off-the-shelf components and spend your time and money on developing the system software.



The newicon system does a much better job of selecting icon colours

6. If a new Amiga is developed with an operating system that has been designed to have retargetable graphics and sound, it could take advantage of the standard PC graphics and sound cards. This would mean the Amiga could have lightning fast 1024 x 768 resolution displays in 24bit. Doesn't sound too bad, does it?

7. The Amiga has a custom disk drive controller that allows quite a lot of control over the drive read write heads, and is one reason why the Amiga can fit 160k more onto a single DD disk than a PC disk. The problem now is that this controller chip is very slow – it cannot even use normal double-speed HD drives. As a result, it is likely that a future Amiga will have a more traditional PC-style 1.4Mb HD drive.

I doubt it would be feasible to use the 3M drives, as the only real reason to have a floppy drive is to swap data between machines, and as very few other computers would have these there would be little point. You could actually argue that a base Amiga would not even need a floppy drive if it had a hard drive and CD-ROM.

8. The standard, four-colour icon set is rather bland to say the least. Over the last few years a number of different icon sets have popped up trying to make the Workbench a bit brighter, but the main one that has stuck is Magic Workbench. These icons are based on eight colours, tend to have a stony look and are favoured by us Europeans.

A more recent alternative has appeared called 'newicons'. This combines both a new icon set design and a new icon system that properly remaps the icon colours to your current screen display and allows much more colourful icons to be used. Personally, I find the icons look a little childish, but Americans do seem to prefer them.

Public sector

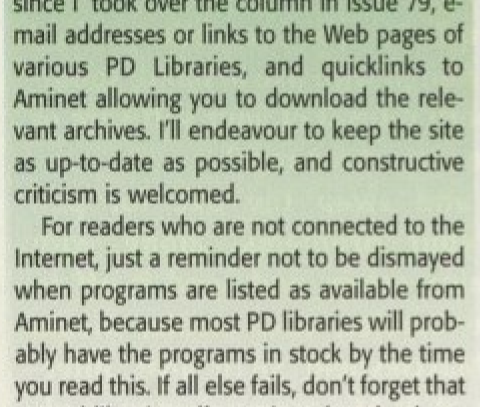
For those Internet users who haven't yet noticed, Public Sector now has a Web presence in a small corner of my own site - simply follow the Software link from Amiga Computing's homepage. At the Public Sector page you'll find alphabetical lists by category of every program I've reviewed since I took over the column in Issue 79, e-mail addresses or links to the Web pages of various PD Libraries, and quicklinks to Aminet allowing you to download the relevant archives. I'll endeavour to keep the site as up-to-date as possible, and constructive criticism is welcomed.

For readers who are not connected to the Internet, just a reminder not to be dismayed when programs are listed as available from Aminet, because most PD libraries will probably have the programs in stock by the time you read this. If all else fails, don't forget that several libraries offer Aminet download services too - try Your Choice for instance.

Dave Cusick once more deliberates, cogitates and indeed digests plentiful helpings of PeeDee pie

GE Editor

Programmed by: Lars Malmborg
Available from: Aminet



GEditor: so simple yet so wonderful

Let's face it, MEmacs is horrible. Yes, as text editors go, it has a few handy features, but they are hidden behind a prehistoric front end. The program lacks pretty standard features like scroll bars, and doesn't even wrap lines around - so in fact if a line is too long it is impossible to read the end of it. These features become particularly annoying if you regularly write script files or use MEmacs as the default text editor for an attractive and modern E-mail program like YAM or Metatool.

GEditor will therefore be the answer to prayers around the Amiga world. It appears in a cute little window of its own, allowing it to be run on the same screen as the aforementioned E-mail programs. It uses the all-conquering Magic User Interface, and in itself it uses very little memory owing to its simplicity.

Using GEditor you can incorporate an existing ASCII file into your document, cut, copy and paste text, and save it out again. The resizable window has a scrollbar and all text is automatically word-wrapped. That, in a nutshell, is it. GEditor does everything that is required of it and nothing more. Truly indispensable.

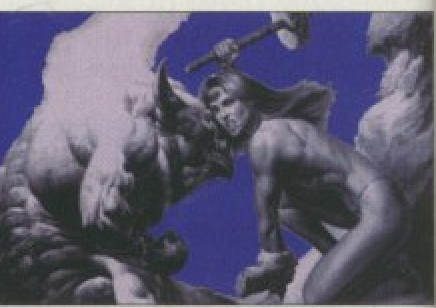
AGA Magic

Programmed by: Various
Available from: KEW=II Software
Disk No: U1175

This is a multi-program disk which, unsurprisingly given the title, is designed to make AGA Workbenches look nicer. It includes the utilities MagicCopper and ColorMagic and a selection of AGA backdrops.

The backdrops are all extremely impressive. They are all in the region of 724x566 pixels, but they use just four colours so they shouldn't chew up too much memory. With the theme of fantasy and featuring stunning artwork, they are definitely worth investigating if Magic Workbench backdrops are starting to look a little tired.

MagicCopper and ColorMagic should between them make it possible to have fancy rainbow effects going on in the background of these AGA pictures, although I must confess I couldn't get things to work exactly as they should. Whether or not you can transform your Workbench into a technicolour whirl, this disk is still worthy of attention if only for those pictures...





The AGA Magic disk contains some superb pieces of fantasy artwork and all in only a few colours, making them ideal for Workbench backdrops

ARGUE 07

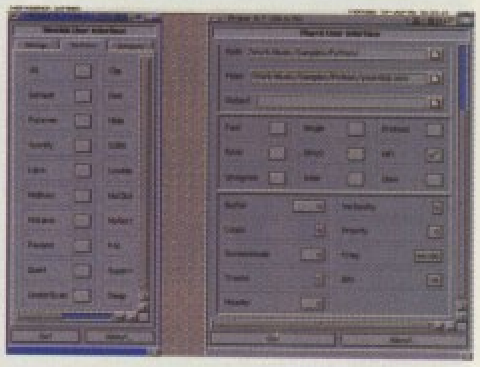
Programmed by: Thorsten Stocksmeier
Available from: Aminet

The average Amiga Workbench these days is a pretty impressive site. The vast majority of Amiga users now employ their trusty machine in various "serious" activities and so want everything to be as attractive and user-friendly as possible. This accounts for the astonishing popularity of Magic User Interface, and the appearance of programs like Argue. Argue's sole vocation in life is to take away the need to use the shell at all, replacing command lines with nice MUI interfaces tailored to individual CLI programs.

Easily installed and including several example scripts, Argue is indeed extremely pleasant to use and certainly makes the Workbench a friendlier place.

Alas, however, Argue is not perfect. The principle problem is that using a MUI interface tends to be a lot slower than simply entering a command in the shell once you know the command syntax. It's a lot quicker to enter "lha x foo.lha ram:" than to click on the lhaGUI script and select the source file and destination directory using standard file selectors - especially if your Shell is enhanced by programs such as KingCON (which adds drag and drop support, scrollbars, and command- and file-name completion).

Secondly, users of ultra-helpful Workbench enhancers like ClassAction (which recognises file-types and presents a list of options accordingly) will encounter difficulties using Argue because the latter program relies on script files. Besides, since you can configure ClassAction to offer you various choices, a command-dependant GUI becomes somewhat redundant anyway.



Get hold of the gorgeous Argue and you need never enter complex command lines again

However, if you don't like ClassAction and abhor the Shell then Argue is definitely worth a look. It is well implemented, easily configurable and visually appealing.

THE EXPERIMENT

Programmed by: John Clay
Available from: F1 Licenceware
Disk no: F1-142

When a few months ago in these very pages I cast an inquisitive eye over GRAC (the GRaphic Adventure Creator) I confidently predicted that within a few months Public Sector would be submerged beneath a deluge of graphic adventures. Frankly, it hasn't happened - indeed, The Experiment is the first GRAC adventure AC has received since then. However, seeing the quality of this effort it surprises me even more that more people have not tried their hand at creating their own Lucasfilm-esque epics.

The Experiment comes on three disks and offers a stimulating challenge for anyone who thinks games should involve mental exertion. You play Bud Lightning, whose space base has been attacked by the evil Stingons. Bud must piece together the events leading up to the attack, and save a primitive tribe from extinction whilst he's about it.

In adventure games the user interface is always a critical ingredient. If the interface is unwieldy and longwinded then playing the game can become something of a chore. Fortunately for The Experiment, and perhaps unsurprisingly for a game created with GRAC, the interface here is neat and intuitive, leaving the player to get on with enjoying the experience. The graphics are nicely drawn too, and though the sound is rather sparse things are atmospheric enough to remain involving.

The Experiment costs £5.99 and comes highly recommended for adventure fans. If you're not sure whether or not it will be your cup of hot steaming stuff, a demo is also available from F1 Licenceware or from Aminet.

The Experiment shows just what can be achieved with a little imagination and a copy of the GRaphic Adventure Creator



Reminiscent of the Lucasfilm walky-pointy adventures, The Experiment will give fans of the genre plenty to be thinking about

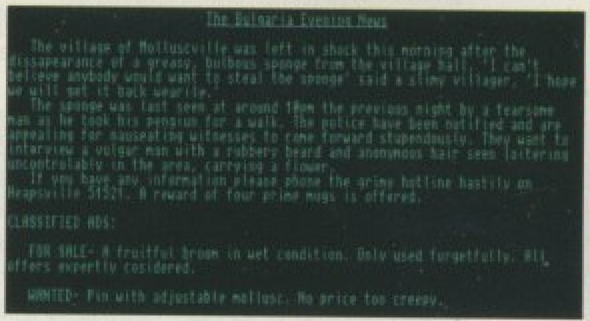
SILLY STORIES

Programmed by: Paul Riggs
Available from: PD libraries, or £1 from Paul Riggs

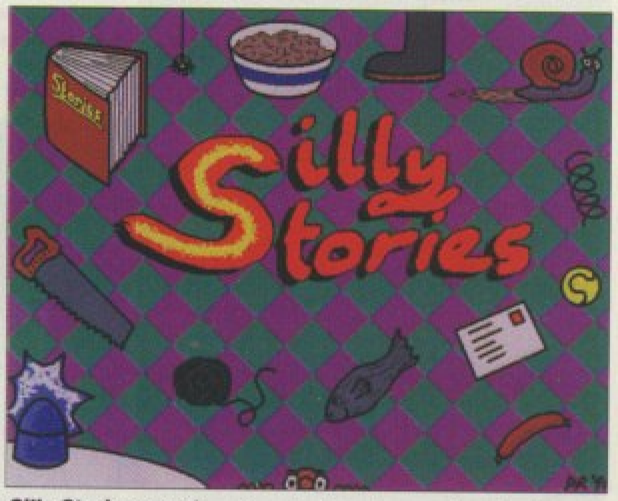
This is a curious little offering which I felt was worthy of a mention despite the author asking in his letter whether I considered it worthy of review in the Amiga Format public domain pages...

The idea is that the user enters a few words and the program then slots these words into one of four preset texts to produce the titular Silly Stories. Often the results are somewhat non-sensical, but just occasionally they can be genuinely funny.

There is an attractive interface too, and all your actions are accompanied by wacky sound effects. Sets of words can even be saved to disk for reloading later. However, the program would certainly benefit from a few extra texts into which those words could be inserted. At present the long term appeal is somewhat non-existent because you will quickly recognise which words tend to be inserted at given points in the text. Still, it might cause a few sniggers the first time it is run.



Our very own silly newspaper story

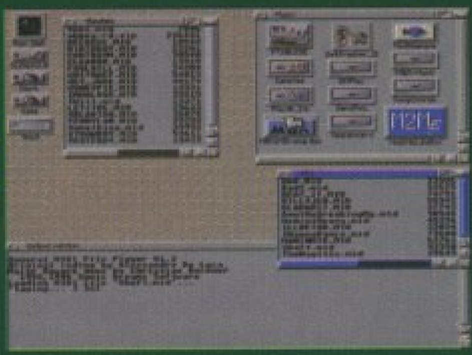


Silly Stories: good fun, for about ten minutes

Listen To The Band

GMplay v1.2

Programmed by: Alessandro de Luca/Christian Buchner
Available from: Aminet



Turn your Amiga into a full scale 32-note polyphonic GM synth with GMplay

Mid2Mid

Programmed by: Simone Riccetti
Available from: Aminet

Cast your mind back, if you will, to the late 1980s. The full force of the economic recession was still to be felt, House music was rampant in the Charts, the Six O'Clock News still used that tacky filing cabinet effect on the opening credits, and the Atari ST was the most popular home computer in England. Every recording studio in the land owned one too, running Notator and using MIDI keyboards to produce all sorts of tuneful pieces.

MIDI of course marched on, and we saw the introduction of General MIDI. A GM synth could be hooked up to a computer and any GM file played through the sequencer software could be heard with the instruments all playing as intended, without preconfiguration.

As things turned out, the Amiga never really took off as a MIDI computer. The Atari ST designers had rather cunningly placed MIDI In and Out sockets on the side of the machine, whereas Amigas have always required an external MIDI interface costing around twenty pounds. But if you don't happen to have an ST sitting collecting dust in a corner somewhere, or a MIDI keyboard and interface, until now the vast collections of GM files available from music companies and on the Internet would have been rather an irrelevance.

GMplay enables any 68020+ Amiga to emulate a GM keyboard. The 1.4Mb archive includes a large number of sound samples which the computer plays back using a special 14-bit sound driver. On faster Amigas, such as those fitted with an 040 or greater, the sound quality is roughly comparable with that obtainable from a CD player (sample quality permitting, of course). However, even on a standard 020 machine, playing back MIDI files at around 10khz, the output quality is respectable enough.

GMplay does place a fair old strain on your processor of course, so 020 owners can't really be doing anything much in the meanwhile without causing the sound to stop every now and then. However even if you don't have a fast processor in your machine, GMplay is highly recommended because it opens up a world which hitherto required vast amounts of expensive equipment to explore fully.

On the other hand, if you do have a MIDI setup involving your Amiga, but you do not have the large amounts of cash required to replace a standard MIDI keyboard with a GM compatible one, Mid2Mid offers a solution. This is a command line program which strips out GM instrument changes and replaces them with ones appropriate to your MIDI synth, saving you the time and effort which would be involved in doing this manually. Mid2Mid needs to be configured to your keyboard using a simple program included in the archive, but once this is achieved, large numbers of files can be converted quickly and easily.

Mid2Mid does have some limitations, however. Firstly, it only converts MIDI format 1 files. Whilst these are probably the commonest files around there are also format 0 files out there, and unfortunately you won't be able to use Mid2Mid to quickly configure them for your keyboard. Secondly at the moment there's no nice GUI, although one is promised for the future and the command syntax is scarcely complicated. In the end then, Mid2Mid offers a simple but practical solution to a common problem, and as such will appeal to many MIDI users.

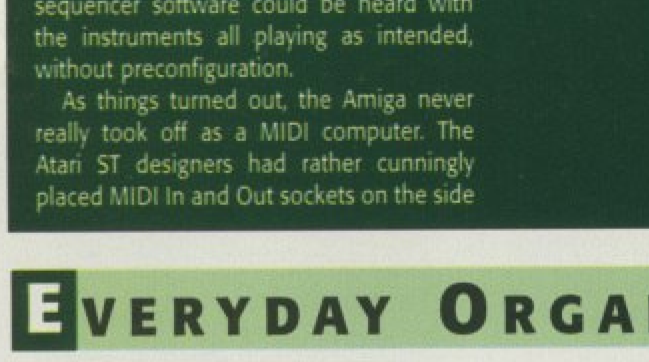
Everyday Organiser

Programmed by: Mathew Wilson
Available from: KEW=II Software
Disk No: A1119

Everyday Organiser is (says the blurb) a collection of four programs which are designed to help manage day to day activities. They are, to be specific, Locate, Alarmist, On-Time and Tasker. All the programs use Magic User Interface, making them highly configurable and visually pleasing.

Locate is an address and telephone book program. It boasts configurable field names, the facility to dial someone's telephone number at the press of a button, and support for external "notes" files under entries. ASCII files can be imported and addresses can be printed out.

Locator, the accomplished MUI address book program from the Everyday Organiser set



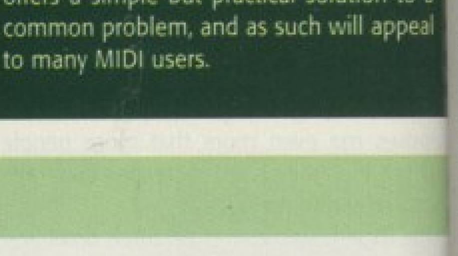
Alarmist is, unsurprisingly, an alarm program, featuring multiple alarms. It is really designed to be used alongside On-Time, although it can be used separately. On-Time displays a calendar on screen and for any given date, appointments can be entered into a small list. Drag and drop support and a well thought-out layout make On-Time a pleasure to use.

Finally, Tasker is designed to help keep track of all those annoying jobs that need doing. Each task is assigned a priority, one of five levels ranging from Lowest to Highest. A list of tasks to be completed is then displayed with the tasks organised into priority order. There's also a Chart option which attempts to summarise the information in an easily digestible visual format, although as the author points out this is still in the experimental stage at the moment. The author eventually hopes to integrate Tasker's functions into On-Time, but for now it works as an interesting little stand-alone reminder program.

Also included on the disk are a few extra utility programs. The first of these is the completely useless but highly comical Talk, a replacement for the pathetic Say program that used to come with Workbench, which garbles in an equally incomprehensible manner. There is also a MUI Time Preferences program to replace the standard version, a file encryptor called Coder, and a datatype-based sound player called Sam.

Whilst the extra utilities vary drastically in usefulness, the organisational programs are all well done and the net result is a useful disk which will appeal to anyone who needs a little help keeping track of their business or social lives.

On-Time replaces a conventional diary and helps you organise your life more effectively



GAME of the month

OUTFALL

Programmed by: David Papworth
Available from: F1 Licenceware
Disk No: F1-141

Tetris remains a classic, but in the falling blobs genre it no longer rains supreme, at least in my eyes. For some time that mantle has been held by a MegaDrive cartridge called Doctor Robotnik's Mean Bean Machine, which I confess I've spent many an hour playing in my time. Tetris has one flaw, in that it never had a multiplayer mode. Mean Bean Machine, on the other hand, pits you either against the computer directly or, far more entertainingly, against a friend.

Outfall brings Mean Bean Machine to the Amiga. Apart from a couple of presentational differences, it's a carbon copy of that superb cartridge. The screen is divided into two Tetris-like wells. Pairs of coloured beans fall downwards, with one flashing bean around which the other bean can be rotated. Your job is to collect together groups of four beans of the same colour, whereupon the group will vanish. Whenever a group vanishes, a black bean falls down the opponent's well. The more groups of four vanish as part of the same move (for instance when beans fall from above to form groups after a lower group has vanished), the more black beans are deposited at once onto the opponent's pile. Black beans do not disappear when four or more are together, only when they are adjacent to a vanishing group of four colours. One player wins when the opponent's well fills up completely.

If all this sounds confusing (and no doubt it does), then rest assured that it all makes for one of the most engaging strategy puzzle games around. It is a truly magnificent game to play with friends. On top of the hugely enjoyable two player mode there is a tournament option whereby up to eight people can participate. There are also demonstration and practice modes, three difficulty levels, configurable bean speed and starting heights, and a wealth of other options. The graphics are superbly slick and faithful to the original, with the beans looking at one another and wobbling entertainingly as they land. The music is passable too, and every now and then the tempo increases as levels reach their climax.



Dr Robotnik's Mean... um, I meant to say Outfall



Outfall: there are still ways to have fun in Andy Maddock's company

Outfall is a Licenceware classic, there's no doubt about it. For £3.99 it would be a foolish individual who did not add this to their games collection. In a word... essential.

SPLAT

Programmed by: Matthew Cutts
Available from: Matthew Cutts

An interesting little game which could fill in a few dull moments here and there, Splat is described by its author as involving "flies, the mouse and a lot of finger abuse". The objective is simply to annihilate flies before they deplete your energy level. You control an on-screen hand with your mouse and the gameplay, whilst mentally scarcely demanding, is not for those with a weak mouse.

Although the graphics and sound are scarcely stunning, and it will wear a little thin rather rapidly, this is a diverting enough offering in the short term. It is best played on an A1200 because otherwise things can be a little less than frenetic. Copies are available for £1.10 from the author.



A LITTLE BIT ME, A LITTLE BIT YOU

I want to hear from you if you have any program, whatever its purpose, which you consider worthy of review. Whether it will be freely distributable public domain, shareware or licenceware, if you feel it's of sufficient quality to merit coverage then stick it in a jiffy bag or padded envelope and send it in with all haste. Although Public Sector receives too many submissions to cover them all, I promise I'll at least look at your work - even if it's yet another Lottery program or Klondike cardset. It does make my job a lot easier though if disks are clearly labelled. Please also include a cover letter detailing the disk contents and price, and giving some basic instructions. The magic address is:

Dave Cusick: PD submissions, Amiga Computing, Media House, Adlington Park, Macclesfield, SK10 4NP

LAST TRAIN TO CLARKSVILLE

Matthew Cutts
3 Greenwood
Killingworth
Newcastle Upon Tyne
NE12 0FE

F1 Licenceware
31 Wellington Road
Exeter
Devon EX2 9DU
Tel: 01392 493580
E-mail: steve@f1lw.demon.co.uk

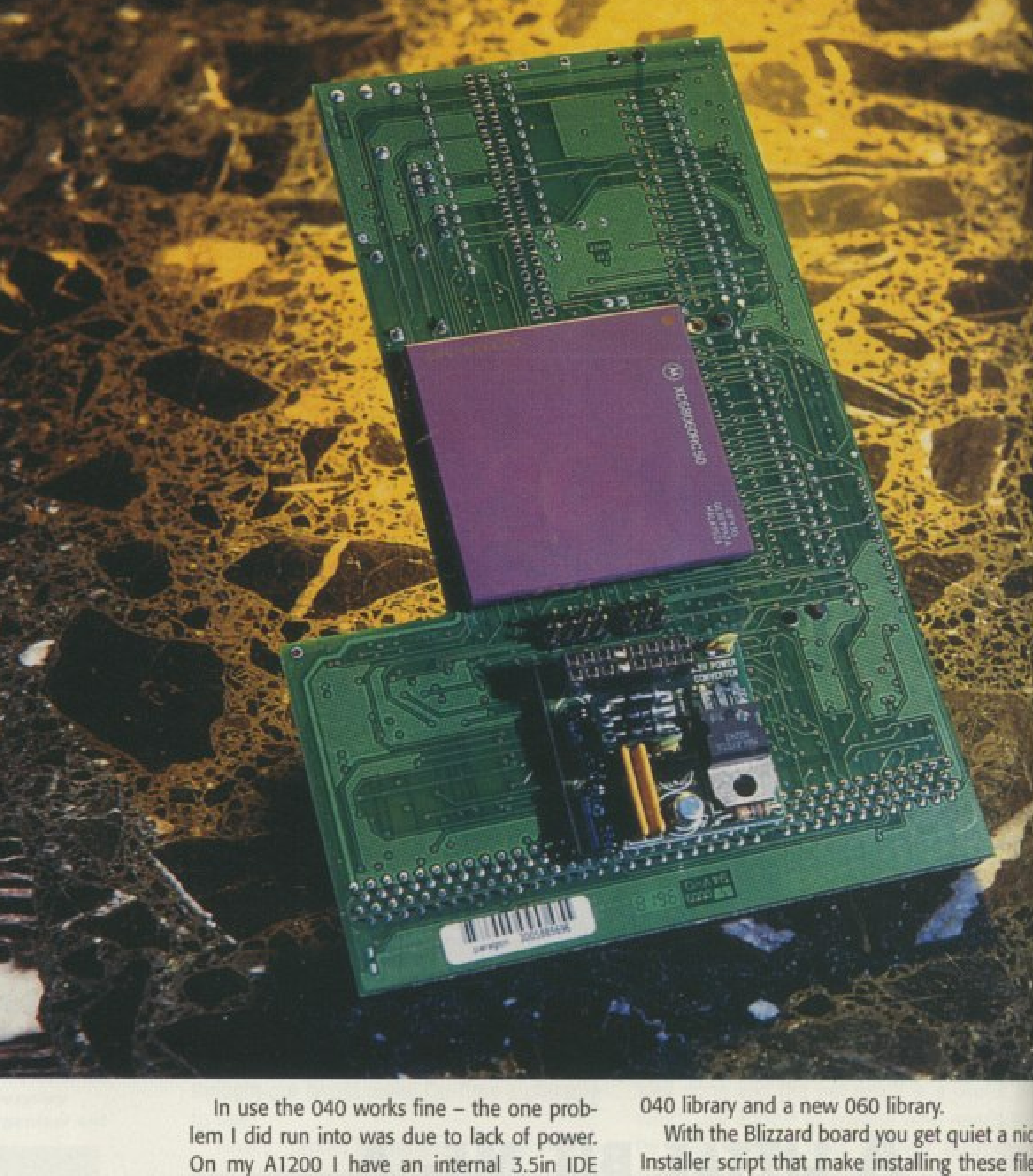
KEW=II Software
PO Box 672
South Croydon
Surrey CR2 9YS
Tel: 0181 657 1617

Paul Riggs
17 Cameron Avenue
Abingdon
Oxfordshire
OX14 3SR

Your Choice PD
39 Lambton Road
Chorlton
Manchester M21 0ZJ
Tel: 0161 881 8994

Divine *finale*

The next generation of Apollo accelerators are upon us, **Neil Mohr** powers up his old A1200 with them



First Power released their Falcon 040/060 accelerator, then Blizzard in their uncompromising style brought out an 060-only board and now Apollo have caught up with the rest of the field and released their own top-end accelerator.

Apollo have taken the same route as the Falcon board and gone for a single board design, taking advantage of the fact that both the 040 and 060 have the same pin layout. The only difference is the 060 only draws 3.3 volts.

Fitting the 040 version of the board is as straightforward as any other A1200 board. If you read the Falcon review you would know that to fit it you had to open up your A1200 to fit a fan. The high power demands of the 040 processor means it requires extra cooling either by using a large heat sync or a fan.

The Apollo 040 version's solution is to use both a small heat sync and a tiny electric fan, all glued to the processor and so the unit just slots into your A1200 the same as any other board. The fan used is very small – a couple of centimetres across – but in use the 040 stays quiet cool and the fan in conjunction with the heat sync does a good job.

Once slotted in, away you go. The only extra thing you may need is the 68040 library. This should come with Workbench as standard but this may not always be the case. The library has replacement routines, mainly to do with the 040 math co-processor being slightly different from the traditional 030's.

In use the 040 works fine – the one problem I did run into was due to lack of power. On my A1200 I have an internal 3.5in IDE drive powered off the internal disk drive's power supply. This along with the 40Mhz 040 was just too much for the standard A1200 power supply. When I switched to a 2.5in internal hard drive everything work fine, but if you are considering this board this is something you should keep in mind.

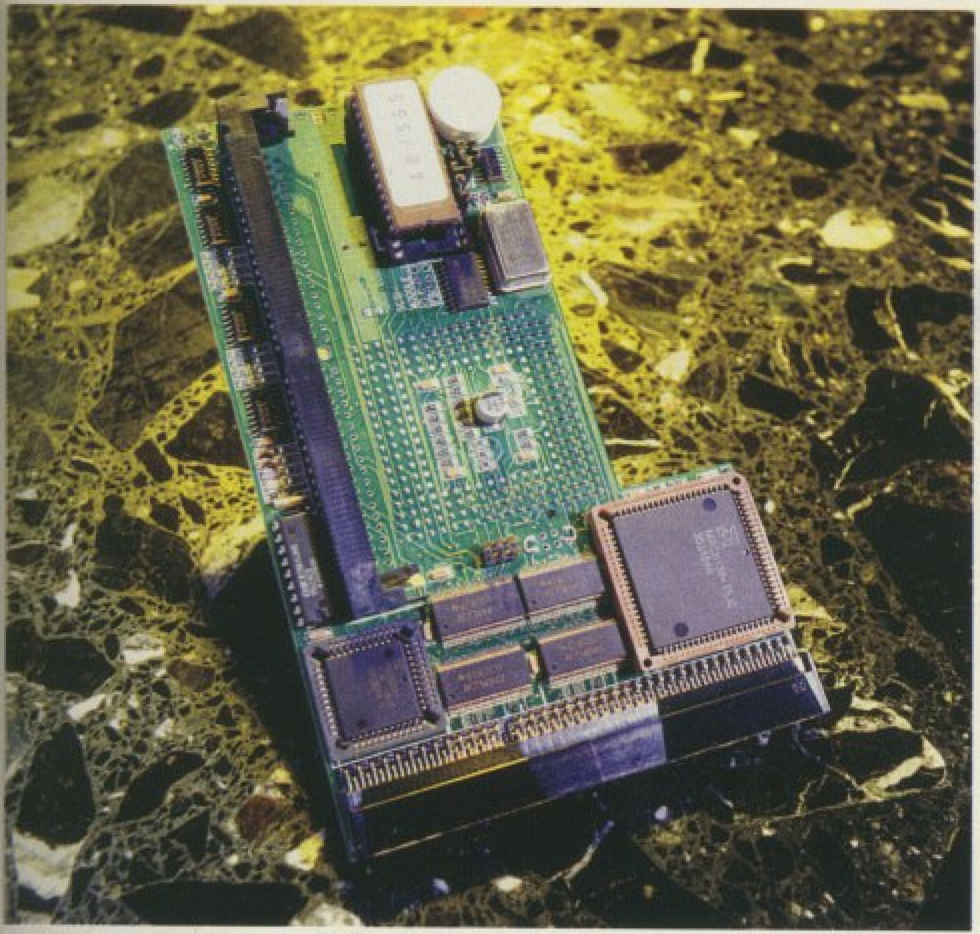
Fitting the 060 version is a little more involved as before you can start you need to install some replacement libraries. Just as the 040 needs the new 68040.library the 060 needs a new library to take care of the differences. The new files consist of a replacement 040 library and a new 060 library.

With the Blizzard board you get quiet a nice Installer script that make installing these files a breeze. The disk that comes with the Apollo does have a AmigaDOS script installer that works but is nowhere near as easy to use as the normal Amiga installer.

Along with the new library files you get a couple of support files. The main program of importance is CPU60 – a supplement for the original CPU command and gives you control over the 060's new system features such as its branch prediction cache, super scalar architecture and store buffers as well as the usual control over the 060's standard data and instruction cache. Two short cut instructions,

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either B or W, let you quickly set the 060 to be either in its worst possible setup or its best.

Once the software is in place you can fit the board and fire up your computer. As the 060 only draws 3.3 volts you do not have any of the power or heating problems associated with the 040 even though it is running at 50Mhz. Due to both boards having the same design, a power converter is plugged into the board to reduce the voltage. It is not as elegant as the Blizzard 060 board but in use it works as well.

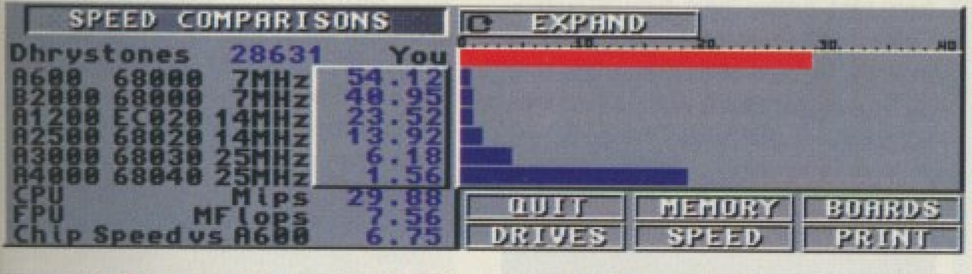
There is still the problem with programs that use a lot of floating point and to a greater extent transcendental maths operations. Unfortunately the sort of people who would want to buy the 060 accelerator are going to be those who would lose out the most.

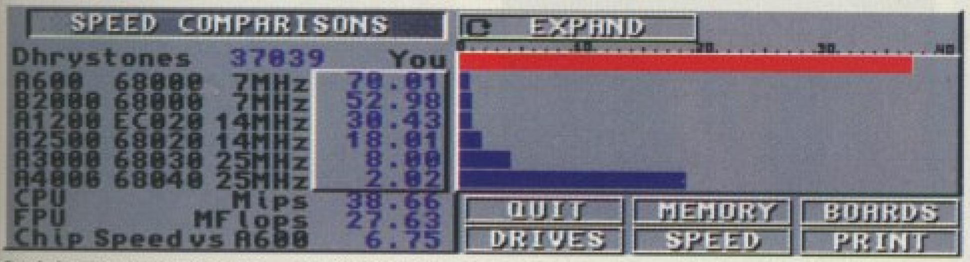
This is shown very well when using AIBB where normally the 060 returns speeds three to four times as fast as a normal A4000. But when it comes the FTrace test that mimics ray-tracing operations and FTrans that tests transcendental functions the speed of the 060 is reduced to about the speed of a standard A1200.

Blizzard offered the best solution by releasing a patcher program that could fix this problem for a few of the more well known programs such as LightWave, Real 3D, Imagine, Cinema 4D and Mand2000. Even this is not perfect and the only solution is to either recompile the programs for specific 060 code, that would also be a lot faster as this could take advantage of the 060 super scalar architecture, or replace all the operations that the processor does not like, which is not very practical.

The Apollo board comes equipped with a single Simm slot that can take a single-sided Simm up to 32Mb in size. Similarly to the Blizzard boards you can also use 72-pin PC Simms that are either 36 or 32-bit, depending on whether they have the extra parity bits or not.

The only real problem memory wise that you could run into is if you are going to be using your own Simm chips. On the board





Sysinfo shows you like it is. Overall the 060 does not seem to run that must faster than the 40Mhz 040, but this is probably due to it using code that does not take advantage of the 060's enhanced architecture, but it absolutely whips it on floating point operations

JUST HOW FAST?

AIBB benchmarks relative to an A4000

Board	040	060
EmuTest	1.76	3.13
Dhrystone	1.59	3.0
Matrix	1.98	3.68
IMath	1.6	3.6
MemTest	4.6	4.75
InstTest	2.35	4.38
Flops	1.61	2.84
FTrace	1.65	N/A

there is a large plug-in chip opposite the Simm socket. This means if your Simm is much wider than about 22mm you are going to have trouble slotting the Simm into place. Really this should not be a problem as long as the Simm is relatively new as these tend to be very streamline.

The other thing you should consider is that the speed of the memory is getting quiet important with these extra fast processors. Even though 70ns and even 80ns Simms will work fine you will be best off with 60ns Simms.

Just as with the Flacon and the Blizzard, the Apollo board can have a SCSI module added to the underside. This has a set of pins that push into an expansion slot and the cable and SCSI interface are fitted to the expansion hole at the back of the A1200.

Currently if you buy either the 1240 or 1260 from Siren, you have the opportunity to pick up a 16Mb Simm for the bargain price of £100 even if you do not need quite this much memory on the Amiga side. With such a fast accelerator and 16Mb of memory it would be well worth installing Shape shifter as you would have one heck of a Mac into the bargain. AC

JARGON BOX

Cache A small amount of on processor memory that is accessed far faster than the computers normal memory. Cache greatly increases a processors performance

ns Nano second, used to measure the speed of chips. Particularly memory chips. Current 60ns memory is good enough even for the fastest Pentiums even though 40 and 20ns memory is available but is much more expensive.

Simm Single In-line Memory Module, a form of memory packaging. Due to its wide use in PCs and that they are quite handy, Simms have become the major standard for memory

Super Scalar Refers to the design of a processor, in that it has multiple instruction 'channels' that allow it to process more than one instruction at the same time

Bottom line

REQUIREMENTS

RED *essential* **BLACK** *recommended*

A1200

PRODUCT DETAILS

Product	Product: Apollo 1240/1260	
Supplier	Siren software	
Price	1260 50Mhz	£574.99
	1240 40Mhz	£449.99
	1240 25Mhz	£299.99
	SCSI module	£79.99
	16Mb SIMM	£100
Tel	0161 796 5279	

SCORES

Ease of use	90%
Implementation	85%
Value For Money	84%
Overall	89%

New Age

Art is many things to many different people. To some a post-modernist sculpture is a conceptualist's masterpiece, symbolic of a world at conflict. To others it's a bunch of rusty tin cans.

So who is right? Does modern art bare comparison with the work of old masters like Rembrandt, Titian and Turner? Are the likes of Damien Hirst redressing the way that we perceive art itself?

As the art elite grow to tolerate more bizarre pieces of work, they also begin to accept the different means being used to create these masterpieces. As new technology emerges, it is embraced by forward thinking artists as a medium in which they can express themselves. This is particularly true of computer art, and with its growing popularity in the art world, the boundaries that were once so wide between computer art and more traditional art are narrowing.

Tony Patrickson is an artist. He trained in drawing and sculpture but became intrigued by computer art.

He comments, "In many cases where there has been opposition or hostility to computer-based work from more traditional concerns, it seems to have been based on a heady mixture of prejudice and lack of knowledge. The most dismissive and out-of-touch voices seem to be those of certain art critics and the usual suspects who like to decide for other people about these things". He continued, "In contrast there seems a genuine curiosity in both artists and audiences about what is going on and what it is possible to achieve through these means. It has to be said that most of the negative arguments trotted out were those already rehearsed over the use of video or photography".

Rick Kise also uses the computer for his artwork. "I can't say there is 'versus' between traditional art and computer art. Fine artists define themselves as 'oil', 'watercolour', 'pastel' and 'graphic' artists, and now there is a new classification, 'electronic' artist. It just happens to be another medium to work with. As to the style of art, ie abstract or realistic, you most definitely have a versus situation, one that can never be reconciled."

To Patrickson, the biggest disadvantage shared by computer art and traditional, is when a distinction is set up between them. He remarks, "To my mind, using computers to make art is simply the continuation of something which human beings have felt compelled to do for at least the last 30,000 years".

Okay, but both methods *do* have advantages and disadvantages, and as those who practise computer art will tell you, one of the main advantages of working on the computer is its flexibility.

Kise comments, "The greatest advantage of art on the computer as I see it is the ability to experiment without the fear of destroying your art. Take a realistic scene and change the colours, distort shapes, apply textures etc. If it doesn't look good to you, hit 'undo' and you're back to the start. One original artwork saved in the computer translates to many new styles and 'new' artworks".

Andrew Powell is an animator and uses the Amiga in his work. He shares this view: "Paper and pencil may not have an 'undo' button, but they're quicker to get your idea down. However, computers allow artists to get basically instant results and easy effects as opposed to the large amount of skill required for fine arts. After I have a bunch of line drawings loaded into memory, I can make the cell painting job as simple as 'click-and-next-frame'. And with still art, high-lights and low-lights can be flawlessly added using a gradient fill."

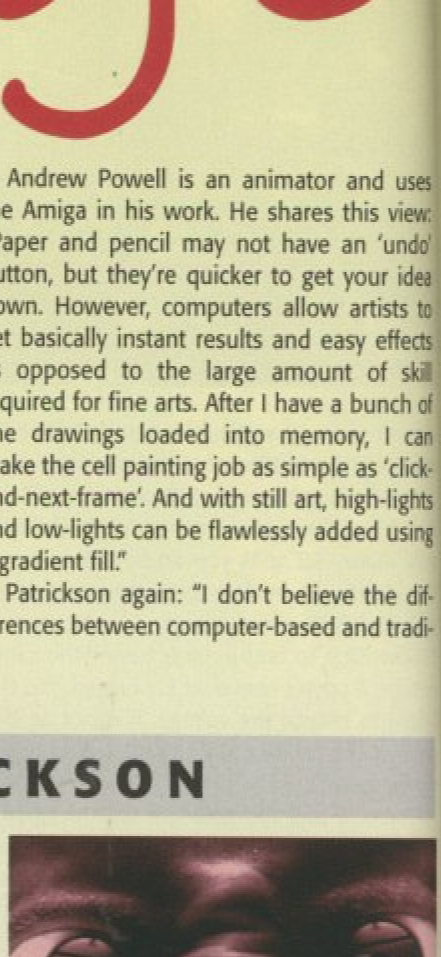
Patrickson again: "I don't believe the differences between computer-based and tradi-

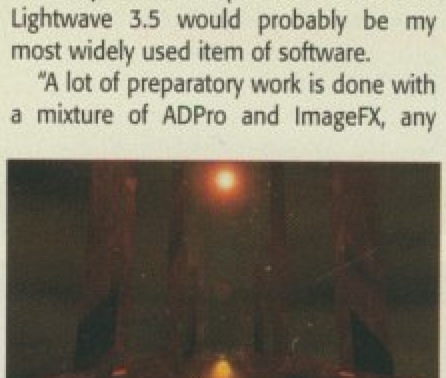
Tony Patrickson

"The sort of work I do depends to a large extent on the venue or situation in which it is going to be exhibited. These have ranged from raves, art galleries and live events, to CD-ROM and at present a couple of Internet-based projects."

Amiga hardware and software used: "The Amiga side of my studio is based around an A4000, boosted with a Cyberstorm '060 accelerator and 14Mb RAM. In terms of day-to-day work, for video grabs I use a Vidi-Amiga 24, either from tape or live input from a camera. Lightwave 3.5 would probably be my most widely used item of software.

"A lot of preparatory work is done with a mixture of ADPro and ImageFX, any





batch-processing being handled by FRED. Nowadays I tend to rely primarily upon the Amiga side for producing the raw materials for a project. To take things further, particularly for more sophisticated multimedia work, means porting material across to the Mac to be able to use the likes of Photoshop, Premiere, and Director.

"Having Lightwave on the Amiga is fine – it's a wonderful tool – but beyond a certain point the software and compatibility just isn't there for dealing with projects for the likes of the World Wide Web and so on."

Tina Hackett investigates the growing popularity of computer art and asks what does it have to offer today's DaVincis?

Masters

tional means of making art are anything compared to the similarities. The big distinctions occur in terms of the nature and extents of techniques involved. In many cases it is just as valid (or sometimes better) to address a particular question with a video camera or a piece of chalk as it is with a computer. Where I think computers are different is in their 'synthetic' nature - being based on Turing's idea of the 'Universal' computing machine. With the technology I have in my studio I can not just work with photographic images, but with sound, clips of video, animations and words, either individually or in combination with each other. As well as this, it is practical to create things which either don't, or couldn't exist in the real world."

Rick Kise

"My style of art is, I would have to say, eclectic. From landscapes to non-objective abstract. In 1989 I bought a used Amiga 1000 for the purpose of scanning photos of my original paintings and drawings so I could print my own art prints. In 1990-91 I was the only one exhibiting computer art prints in the Oklahoma City area art shows."

Amiga hardware and software used: "I sold my A1000 in '93 after I bought my A3000. As an ex-Commodore stock holder I'm sad to say that since December '93 all my commercial work has been done on a PC. The A3000 gets used periodically, transferring my Amiga paintings to the PC, where I convert them to 24 bit and repaint them in Adobe Photoshop."



Doran Golan also sees the advantage of computer art: "After many years of showing work as an expressionist painter, I began using the computer in my art in l984. To work on the computer was a natural step in the progression of my work, because with the computer I could explore a realm of 'Pure Abstraction'. To me, the work I create on the computer is literally abstract, because it 'does not exist' as an object in the conventional sense as I am working on it.

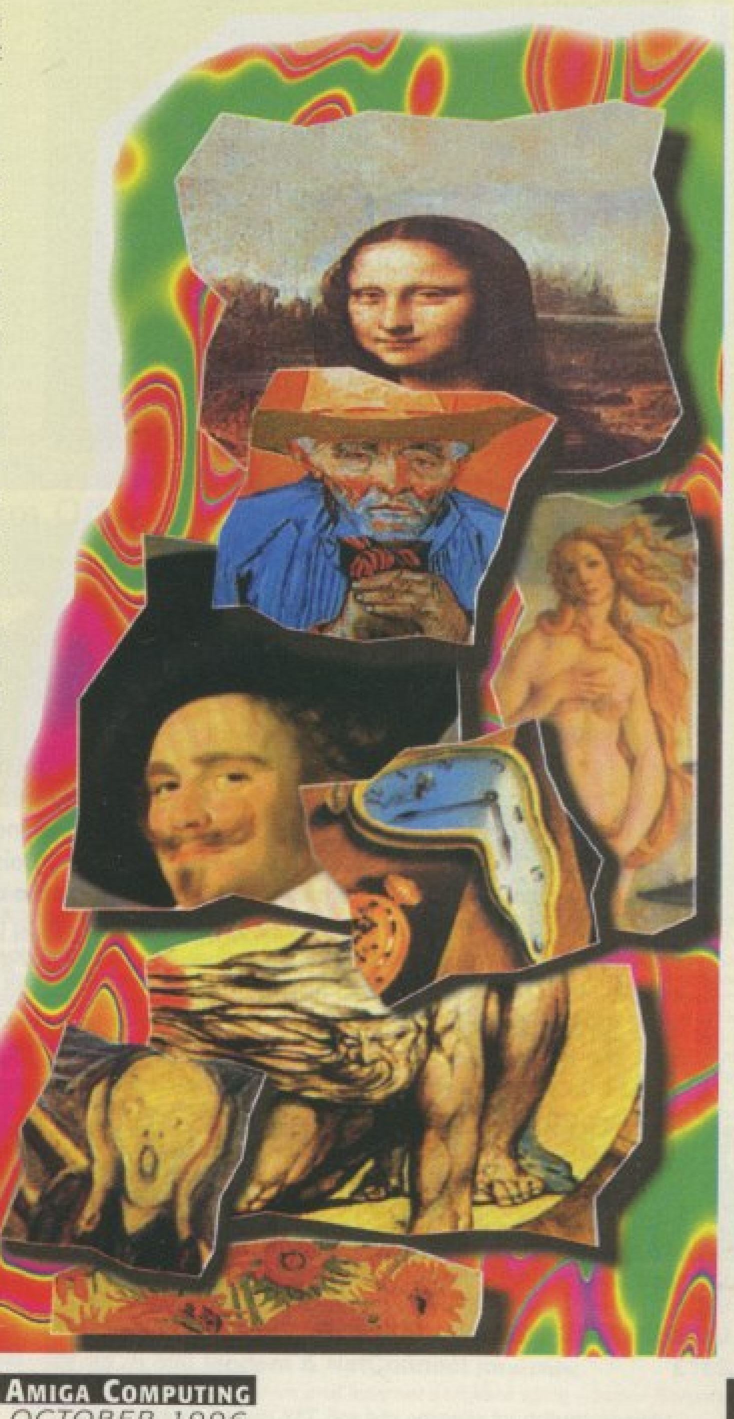
"In a time of rapid changes in the world, the computer seems more suited to express the flow of thought and emotion than the more static medium of painting. As an analogue of the human mind, the computer facilitates change and flow, and reflects the speeded up tempo of the contemporary social environment."

However, even in the computer art sector, there are divisions in audience. Patrickson defines them as an arts audience and a computer user audience: "An arts audience is more likely to focus on what the work is about, regardless of how little the work has pushed the technology out of the ordinary. Conversely, a computer user audience can too readily succumb to the 'Gee-Whizz' factor - that it doesn't matter how dire the work is as long as the special effects are okay."

This, it seems, is the pitfall the electronic artist must be wary of - computer art can be treated like a gimmick, a special effects novelty that becomes outdated as the technology becomes passé. When we first saw William Latham's organic artwork in the early 90s, for example, most people were impressed. Now some believe his work was a gimmick that has lost its charm. Computer-generated art has yet to pass the test of time.

There is no doubt, however, that the computer will be increasingly adopted by the serious art establishment. Hi-tech special effects for their own sake will be shunned, but the advantages raised by the electronic process are bound to appeal to a new generation of talented artists.

Ultimately, the key to the computer artist's success will be based on long-established principles. Like the best artists, the electronic painter will focus on the art itself for, as John Ruskin, the English art and social critic, said, "Fine art is that in which the hand, the head and the heart of man go together".



ANDREW POWELL

"My biggest current project is a fully animated feature called 'Magic'. This film will be a comedy medieval fantasy, with overtones of some of my favourite authors, like Terry Pratchett, JRR Tolkien, and Monty Python. The story is mostly serious, but also has scenes where we just HAD to have a little fun.

"Co-author of the script, and personal friend of mine, Bob Milne, came up with a scene where the main characters encounter a troop of Vikings on a portage.

What I'd REALLY like to do is get Terry Pratchett's permission to work on a cartoon version of his Disc World novels. That would really sell!"

Amiga hardware and software used: "I use Disney Animation Studio for Pencil Test animation, Deluxe Paint 5, Brilliance 2.0, Photogenics 1.25 NTSC for clean-up and colourisation, and MainActor Pro for final production and editing.

"I know Disney Animation Studio is getting more than a little obsolete these days, but it is totally geared for animators who recognise the tools it offers. I use it to get the line animation done, and then I can move my work to a more advanced program.

"DPaint and Brilliance have always been the most popular packages, but Photogenics is a total MUST-HAVE for serious artists. For Hardware I use a Tabby Graphics Tablet and the trusty GVP G-Lock genlock. Both are great because of their affordability."



TOOLS OF THE TRADE

For a budding artist there are many options available for the Amiga which will help you achieve your desired effect. These vary from the basic paint packages to rendering and animation. There are plenty available of good quality, but your choice will depend on what you want to do with it. TVPaint has always proved very popular as a professional option, and with a Wacom graphics tablet you have an excellent art environment in which to produce your masterpieces.

Although expensive in price, the latest version, 3.0, proves a desirable option for the serious computer user because of the many features it offers. These include the Big Edit option, which is invaluable to commercial artists as it takes away the problem of resolution demanding huge amounts of memory. This works by defining the size of the project, then selecting a scaled area to work on. Another aspect which impressed was the layers function, which lets you view multiple 24-bit images on the same screen whilst still being able to edit them independently. You can view layers A, B, or C, work on them and view them together. TV Paint does require a graphics card to work, though.

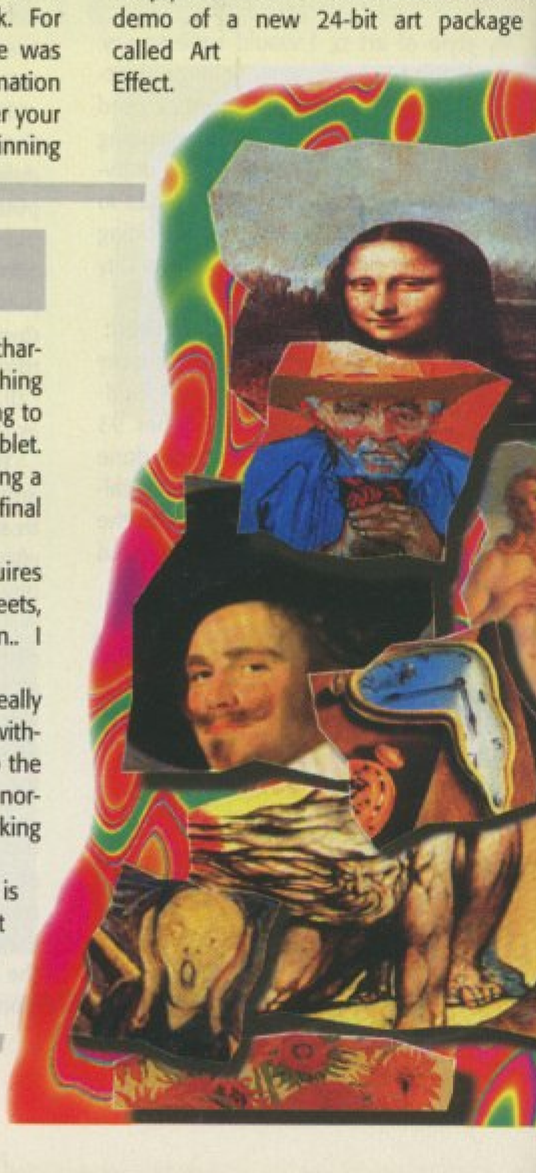
One of the older but still superior options is Deluxe Paint. It is now up to version five and has still kept up with the best of them. Deluxe Paint offers the user the ability to create pictures and animate. On the pictures side it offers realism in that the media you wish to paint on can be chosen from various oil canvasses to wire mesh. The brush types, however, are limited to watercolour, felt tip, oil and chalk. For Deluxe Paint 5, the airbrush feature was completely overhauled and the animation option improved to allow you to enter your key animation frame at both the beginning and end points of your sequence.

Brilliance 2 is also worth mentioning. It's difficult to get hold of these days, but it's faster than DPaint and has a proper 24-bit version with fast HAM-8 display.

Almathera's Photogenics is also a highly regarded product which provides both a painting package and image processor. Version two, complete with an overhaul and new features, was released only last month. Almathera decided to put this second version on CD, making installation very quick and also allowing more room for example files and a tutorial. To paint in Photogenics, you work on an invisible layer sort of like a protective film over your original image. This means you can draw away to your hearts content, and if you're not happy with it, you can wipe it without damaging the original image. Version two also provides plug-ins called Effects, which allow you to apply an effect in three different ways rather than just being able to add it to the paint layer. It also has a virtual image function which allows you to cut out an area of the larger picture and paint on it separately.

Image FX has been mentioned in this article previously - for many artists, along with ADPro, it is the essential image processor for the Amiga. Image FX it still being developed for the Amiga and has recently received a major new update. Version 2.6 has many new features, including a fire generator, bubble effects and a film grain facility.

If you're feeling inspired after all this, simply turn to this month's coverdisk for a demo of a new 24-bit art package called Art Effect.



THE CREATION

The Amiga is an excellent creative platform and many famous artists have benefited from the machine. Arguably the most famous was Andy Warhol, who once commented, "The thing I like most about doing this kind of art on the Amiga is that it looks like my work". Others include Dave Gibbons, the man behind the Watchmen comics, and the Aardman Animations team. Andrew Powell offers his views on why he thinks the Amiga has a winning formula:

"The bottom line would be the price of equipment and ease of use. I would need to use a Pentium 130 with an Mpeg board and 100 Mb of RAM to get the same results I get with my A4000/040 with 18 Mb RAM. The fact that the Amiga is so geared for video makes it the most cost effective choice amongst all the machines out there. It's also a whole production studio in-a-box, where I can get 66 Frames Per Second (NTSC video) in two to 256 colours on-screen, in High-Resolution."

Can you give us an idea of how the Amiga helps your work?

"I mainly use paper and pencil to get most of the character animation done in rough. Let's face it, sketching with a pencil and paper is a LOT quicker that trying to do the same thing with a mouse or a graphics tablet. When the drawings are done, I can scan them using a flat-bed scanner, and use the computer for the final line and adding colour.

"Doing animation the traditional way requires reams of paper, coloured pencils and acetate sheets, not to mention a peg-bar, hi-8 camera, lights, film.. I could go on... Really!

"The Amiga takes the place of some of the really expensive stuff and lets me get on with my work without totally blowing my budget. Plus, it speeds up the process so much that I can do the jobs that would normally require three or four other maniacs working alongside me.

"And lets face it, using the Amiga to do artwork is actually fun and enjoyable. It's a medium that allows an artist to make sharing their work as easy as copying a file or clicking a link."

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MAX power

Want to be a **Sysop?** Then let us begin. **Jason Jordache** takes you through



MaxsBBS gets some stick. Whatever negative image it has seems due largely to the deluge of new MaxsBBS Sysops popping up all over the place. They set up over night with little more than the original Maxs config of crude ANSI screens and the distinct taste synonymous with poor quality BBSs. There are so many that good Max boards are overshadowed and tend to get caught up in the same image. Max lacks the power of BBS software you pay for on the market nowadays, kind of like using Deluxe Paint 2 with Brilliance 2 and its power, extras and more polished look, should you take to pixel art.

But what better way to try the waters of comms than via a free Public Domain, easy-to-use, all-in-one package. I'm going to show you what's possible with this program and the tricks up its sleeve that give a polish, making all the difference as to whether new users call back.

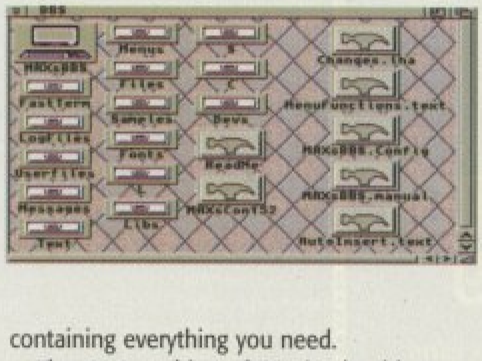
After a few months, if you like what being a Sysop is all about, you might consider upgrading by buying one of the newer BBS systems available like Zeus and Xenolink. Or you may stick with Max's. A Sysop can make his BBS a permanent agenda on his HD, going 24 hours, but finds Max's still offers all he requires.

MAX CONFUSION

Though one of the most easy-to-use BBS systems, some parts of Max's and how they link together can confuse;; the general understanding of how it works taking time to sink in. You might well end up reading the manual through by the end of it, but dipping in at random is probably how you'll begin.

Before getting stuck into the secrets and ways of improvement behind Max's, we'll make sure we're together. We'll assume you have a modem, a hard drive, and have experienced the comms scene long enough to be past the teething troubles of downloading files and logging on to BBSs.

Max's BBS version 1.54 is available to download on plenty of BBSs. The 1.54 archive is largely to be found containing just the master program and none of the manuals and assorted bits necessary to go into your BBS directory. If this is the case, use the search files option on a BBS to track down version 1.52 – usually the archive you'll find containing everything you need.



The BBS directory on your hard drive won't be the same, but similar

The 1.52 archive of Max's should come equipped with a startup-sequence and all the drawers necessary for booting from floppy. There have been Max's boards run from floppy, complete with limited mail network ability and a few files in the external drive. A hard drive makes sense with a BBS, and not just to avoid people feeling sorry for you. With the

ANSI

Thousands of HD files, extensive mail network support, multiple on-line CD-ROMs, a 24 hour BBS and preferably an extra node is what a user wants from his local board when he's after the works to pick and choose from. Boards offering much less are still used, usually when it's the only local one or when he gets along with the Sysop.

This, above all, helps in creating a professional BBS, along with upgrading by buying better software more capable of handling the system of mail nets and so on you may wish to offer the user. In the end, anyone can save up and buy and work on setting up these things, but what about a BBS that stands out? It's all in the ANSI.

Polished, well designed ANSI will set your BBS out from the rest – like reading a well presented fact sheet with thousands spent on graphic designers compared to the original text scribbled on bits of paper. The image, how the information looks in its presentation, decides the first and continuing impression. If you don't feel artistic you need to track down ANSI. To help with this there will be fresh ANSI screens – to add to and replace the old – that I created for my own BBS for you to build upon.

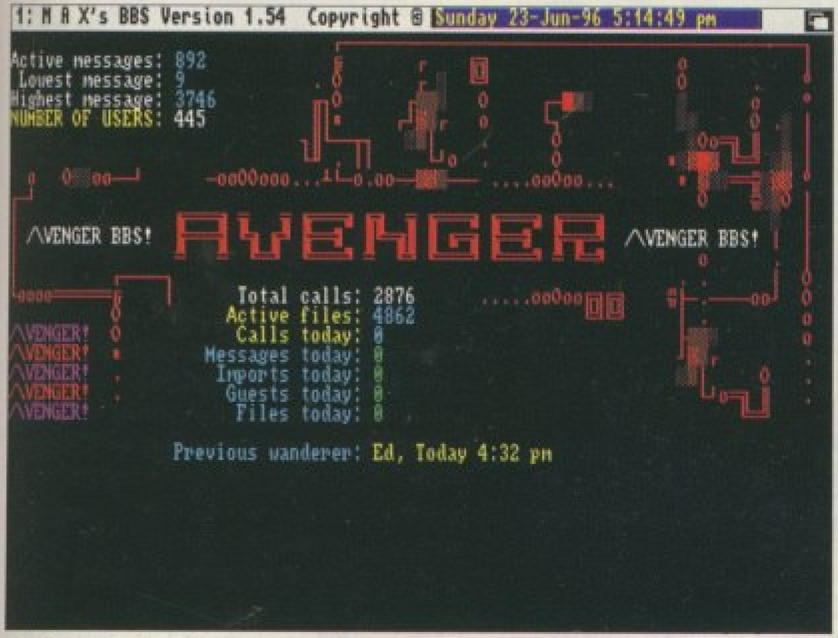
One night I wondered what could be done to make a BBS different. Mine evolved into a novelty approach based around a medieval castle, Knights and wenches, which most appeared to take to instantly. That explains the nature of the ANSI you'll find on future coverdisks and lets you in on the secret of one potential path to success using the themed approach.

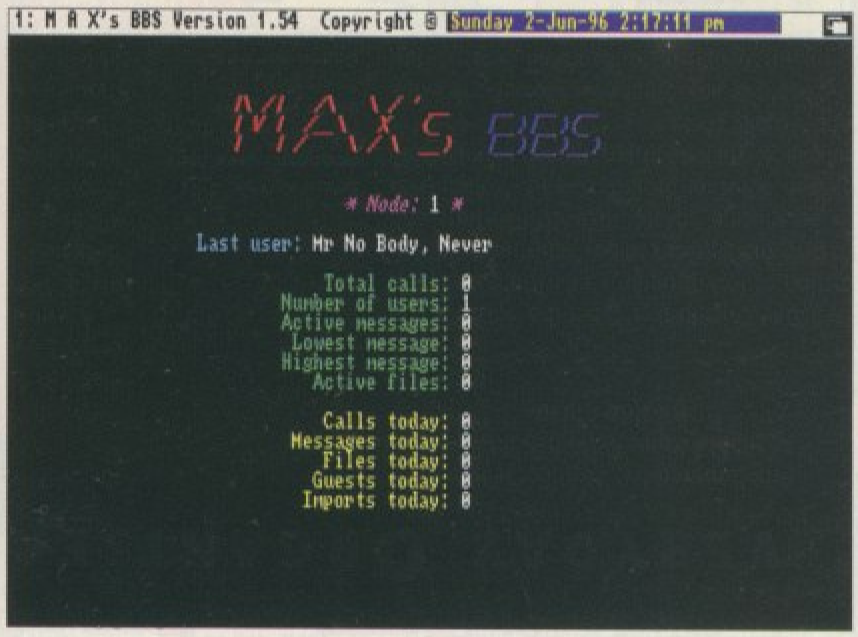
ALL ABOUT MAX

Long ago, everyone was hooked into a mail network called MaxNet, built around a gathering of Max's BBS Sysops spanning all the way – via a link – to Australia. The people loved Max and were demanding updates. They didn't even mind paying for the pleasure. Apparently some guy down under had taken over updating Max's from the original programmer, Anthony Barrett, but the rumour goes that his hard drive crashed and all the work for Max's was lost.

The project was never restarted, if indeed it began. As far as I know, Max's will stay in its current form, the 1994 version 1.54. I came in at 1.52 where we stayed for a while before 1.53 came along. This was quickly backed up with the release of 1.54, which had a back door removed that had been originally coded in and known only by Anthony. But it's gone now. No system is completely safe of course – a hacker finds his way into the most well protected area, back door or no back door, but there's no great cause for worry as far as hackers are concerned. You never hear reports of hacked Max's boards, and Sysops sleep sound at night with their BBS left on. It's only when someone hates you...







Moving from how it always begins to a more professional image

HD, what amounts to a respectable mail and file storage area is offered to users, and the longer redraw times of ANSI screens and add-on programs loading from floppy become minimal.

Alternatively, call the PD library 17 Bit Software on 01924 366982 to get the latest version of Max's, making sure it comes with all the files you will need.

If the 1.52 archive has files all over the place, bung them all into one main directory called BBS on your HD so you know everything is in there. Any files (like FF) in Max's C, Devs, L, Fonts and Libs not present on the HD partition you boot from, can be copied into the relevant drawers on the boot partition.

Copy the main "MAXsBBS" program from the 1.54 archive into the BBS dir, thus over the top of the old Max's program. However, the update needs to be converted to use the old 1.52 files. There's an archive you should find in the Max's support file area on BBSs, often named ConAll.lzx. Containing, among others, MAXsCon52-54, it converts between data files from established Max's versions, so even if you've adjusted an old Max's config, it can be revamped to be compatible with 1.54.

Simply run MAXsCon52-54, move to your BBS directory and select MAXsBBS.Config before clicking the Convert button. It then goes through all the data files, changing only their headers. Therefore any config changes you've saved using an older version of Max's will still be there unaltered.

Load your User-startup from S into a text editor. A couple of lines need to be added:

```
FF
Assign BBS: <pathname to BBS directory, ie
Work:BBS>
```

FF, which should be in C, is a 3K file standing for Fast Fonts and works in conjunction with Max. Save the User-startup, reboot your Amiga, and with everything in place run Max's BBS. Have a play around and try to get a feel of the way things work before we meet again next month.

ANSI EDITORS

HyperANSI – we all have our favourite ANSI editor claimed to beat the rest, and mine is HyperANSI v1.07. Track this down because I'll be using it to outline ideas behind preparing ANSI. PlusED 2.0 is another ANSI editor we'll use. The interface is more polished-looking than Hyper, but for me I've found Hyper to be the best for most jobs. So that's five archives mentioned this month: Max's v1.52, Max's v1.54, ConAll.lzx, HyperANSI v1.07 and PlusEd 2.0.

MAXsBBS. CONFIG

This is found in the root of your BBS directory – the gold mine from where to build your identity. This should be backed up as you continue to make changes to the basic Max's structure. Lose this file and you start from scratch, but starting again has its merits. Should you ever buff up and lose everything, the second time round you will understand a great deal more rebuilding the configs.

MAX TIP

Depending on memory, you can have any number of Max's nodes running. Simply run the program a second time to launch node 2. You can do this while someone is online, selecting Sleep at the requestor so as not to throw them off. Useful for accessing things such as the files editor which otherwise you couldn't get at.

NAMING NAMES

User-startup: – this is an ordinary text file residing in the S directory, containing a list of commands on successive lines that the Amiga executes when booted. If the file isn't present, one can be created with any word processor by saving out a text file called "User-startup".

Pathname: – a pathname points to or tells the computer where a given file or directory is on a hard drive. If your BBS drawer was in a HD partition called System, the pathname would read, "System:BBS".

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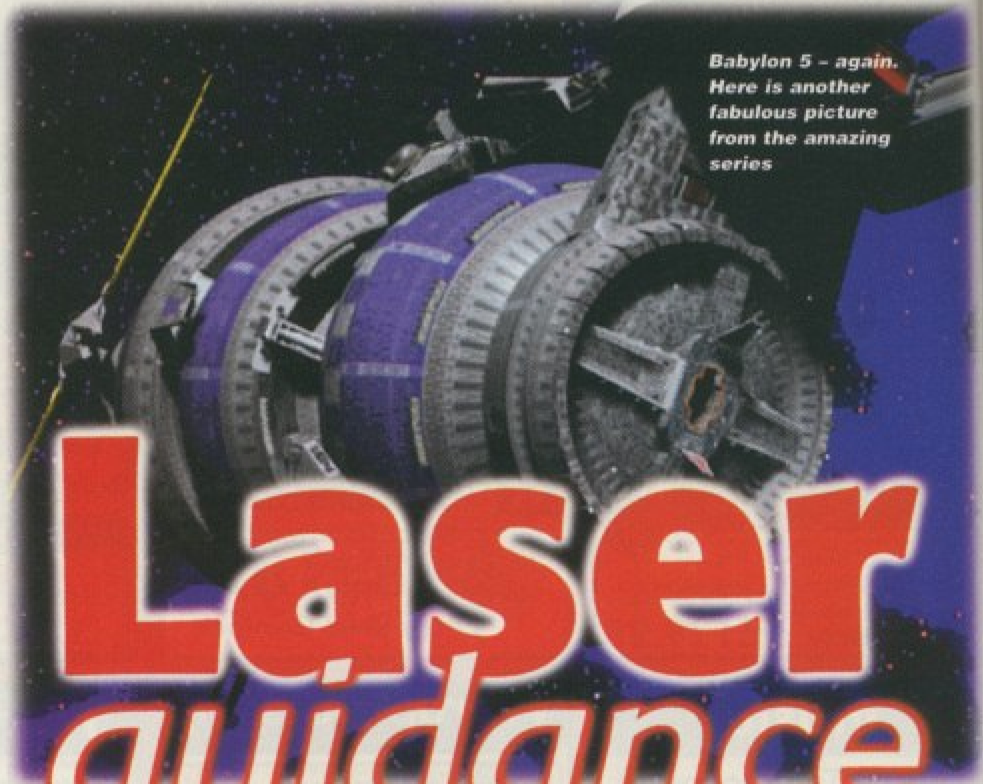
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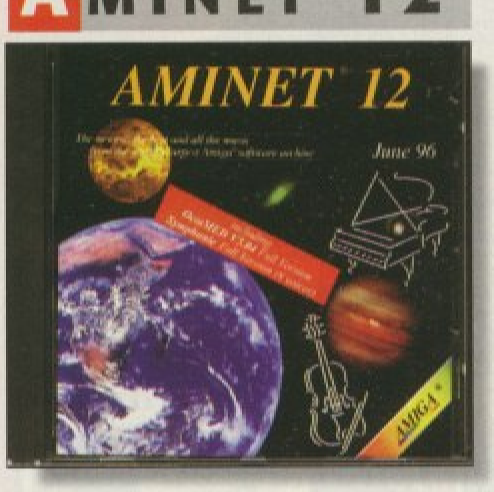
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Laser guidance


Babylon 5 – again. Here is another fabulous picture from the amazing series

Andy Maddock brings you the latest and greatest from the world of CD

AMINET 12



The last 12 releases of Aminet have, understandably, contributed to it becoming one of the most popular CDs of all time, because users who haven't got Internet access have to sit back and wait for the next CD so they can get their hands on the latest programs.

Aminet 12, features all the latest uploads until June '96, so that it's right up to date.

A few months ago, Aminet 10 featured a full version of Pagestream, and Aminet 12 is no different because once again, it offers you a full version of a commercial product. This time all Amiga music fans are in for a rare treat, as OctaMed V5 is included.

In my opinion, version 5 was the release I always felt comfortable with. I found it difficult to adapt to version 6, regardless of how many extra features it boasted, so I always returned to my good old version, and still do.

So what more can I possibly say? With all the latest releases in the entire world and a full commercial, professional music program, buy one today!


A guitar with a nice lightning effect. Ooh, it's the best

Bottom line

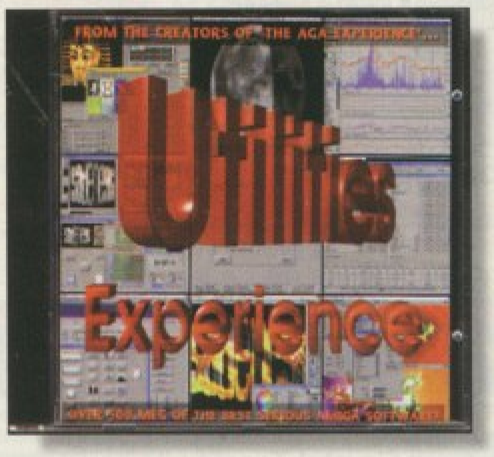
PRODUCT DETAILS

Product:	Aminet 12
Supplier:	GTI
Price:	£14.95
Phone:	+49 6171 85937

SCORES

Ease of use	89%
Implementation	87%
Value For Money	88%
Overall	89%

THE UTILITIES EXPERIENCE



Around two months ago we reviewed AGA Experience 2 and gave it a nice healthy score. This month, Sadeness PD and Blittersoft have joined forces to bring you the Utilities Experience. Which is nice.

If you've ever needed things such as graphic tools, icons, commercial demos, shell tools as well as programmer's tools, and source code, then a CD is almost certainly your best option. Unless, of course, you want to pay a PD library an awful lot of money to send you the products individually.

The highlight of the CD has got to be the amount of commercial demos. There are demos of packages such as Cinema 4D, Blitz Basic, ImageFX, Storm C and Xi-Paint, and all these packages are surrounded by various programs which you would expect to be on a utilities CD. There's really too much to say in this short piece, although I will say that most of the software is ready to run, which most Amiga users appreciate because there's no de-archiving process involved.

As far as Utility CDs go, this is pretty much standard in content, only it comes with plenty of commercial demos so the public can get a taste of the whole program. The bigger Amiga users probably wouldn't purchase this because they would prefer to gain individual programs, but any other user whose Amiga is in need of a rapid update in the way of datatypes, disk tools and icons will need this CD.


On the Utilities Experience, is a demo of the excellent Digital Universe.

Bottom line

PRODUCT DETAILS

Product:	The Utilities Experience
Supplier:	Blittersoft
Price:	£14.99
Phone:	01908 261466

SCORES

Ease of use	84%
Implementation	81%
Value For Money	86%
Overall	85%

EMC INDEX



The Index CD by EM Computergraphic is exactly what it says on the front cover. It's an index. It will help you find pictures of a particular type without having to desperately search from CD to CD just for one picture.

Here at *Amiga Computing*, this problem arises far too many times. When we need a picture to accompany an article, nobody knows where to start or which CD to start with. In an ideal situation, the Index CD should be the perfect solution, but it isn't.

Firstly, the Index CD contains thumbnail screens of each directory from each CD. The variety of CDs stretches from Aminet 3-7 to specific picture CDs such as Gfx Sensation, World of Clipart, Gifs Galore and Gif Galaxy. Some of the CDs are based on the PC too, so you may not even know some of them, let alone have them in your collection. Oh, that's another point. Just in case you're confused, you don't actually get all these CDs for the price. You're already supposed to have them in your collection – I'd just like to clear that up!

The problems I came across when using it were, firstly, that we only had a couple of Aminet CDs left in my bottom drawer, which meant it could only search two, so the Index CD seemed a bit pointless. Secondly, EMC stresses how quickly it is to search through all these CDs to find the picture you require, but it doesn't even include a search engine, which would have been invaluable. I understand that a lot of CDs simply name their pictures something ridiculous like Az98b45ZX.45, which won't show up on a search engine, but it would have been better to include a description of the picture. As an example, if you were looking for a picture of a footballer, simply typing 'football' would have found a number of matches and it could have told you which CD and what directory you could find it in.



As you can see, the Index CD is full with... indexes. If you want to be organised, buy it

As it stands, the Index does seem a little pointless, especially as most of the CDs contain thumbnail screens anyway, and you also have to own the CDs covered. For £14.99 the Index CD certainly doesn't boast value for money, but if you use a lot of different artwork on a regular basis then you may end up paying full whack.

Bottom line

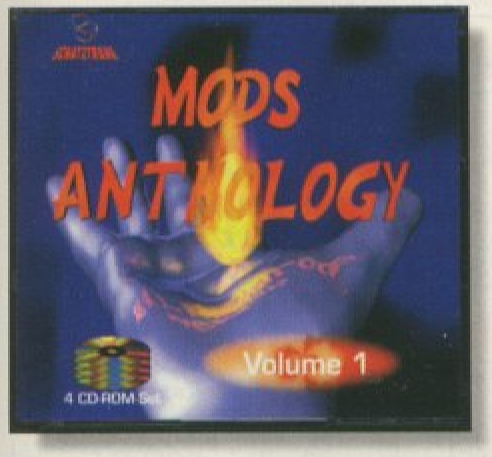
PRODUCT DETAILS

Product:	EMC Index
Supplier:	EM Computergraphic
Price:	£14.99
Phone:	01255 431389

SCORES

Ease of use	80%
Implementation	82%
Value For Money	78%
Overall	80%

MODS ANTHOLOGY



If Amiga music is your kind of thing, then this massive release by GTI will almost certainly impress you. The package contains four CDs which feature a number of artists in alphabetical order. In total, there are a whopping 18000 mods, which works out at nearly 1000 hours of music, but that's not all. There's also 25Mb of modules, players, converters and utilities to enable you to hear every single one.

There's only one thought which crosses my mind, and that is: 'why'? Why would anybody want to sit down and listen to over 1000 hours of Amiga music. Come on, hardly any of it's professional in any way.

I absolutely hate a huge chunk of it, especially the tunes which feature a badly sampled saxophone and loads of beepy noises. Okay, so the sampled stuff from original tunes is good, but only when it has been remixed. I just can't think of a good reason for wanting such a huge amount of mods.

I suppose most users would happily rip out the good samples and include them in their own tunes to save time on sampling. Ah, so there is an advantage.

If you want an absolute ton of Amiga music then you should seriously check this CD out. You won't find a bigger collection anywhere else.



The Mod Anthology comes on four CDs. The last features players such as the Hippoplayer

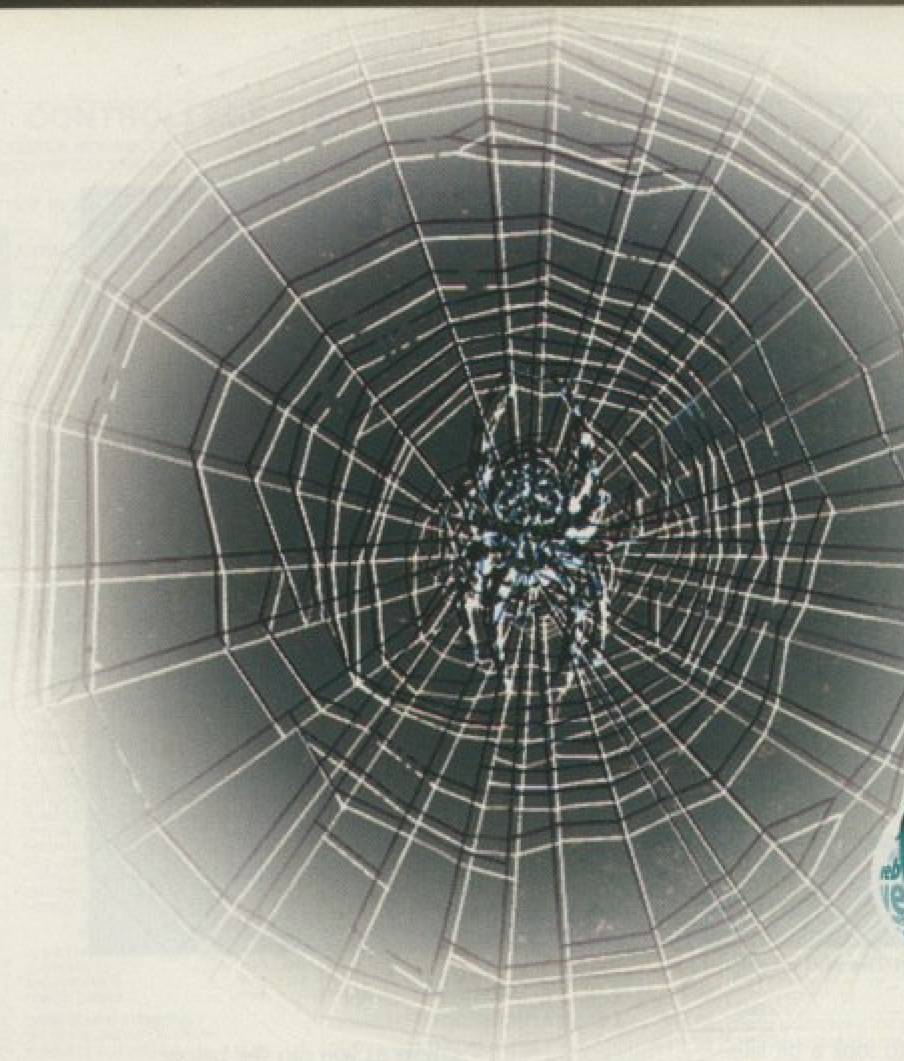
Bottom line

PRODUCT DETAILS

Product:	Mods Anthology
Supplier:	GTI
Price:	£tba
Phone:	+49 6171 85937

SCORES

Ease of use	90%
Implementation	84%
Value For Money	N/A%
Overall	85%



Web design Part 4

Turning *the tables*

I hope you had no trouble last month with uploading your web pages to a service provider. This month we can really start to jazz up our pages and format them with table tags.

With HTML it is good to think of all tags fitting into two types: Those that directly effect the appearance of the text/images such as <body>, <b>, <i> and <u> and those which are formatting/layout tags such as
 <p> and <table>. This is only the way my mind works when designing a web page, but it can really help you understand HTML. If things don't look quite right with the layouts then change the layout tags until things are how you want them!

One thing to remember is that no matter how hard you try your pages will look different on all the various browsers that are out there. It is always good to write your pages with all the browsers in mind, sadly I don't mean all the Amiga browsers (see boxout). At this point only Ibrowse can handle tables and thank heavens it can because tables are one of the most important layout tags.

APPEARANCE TAGS

Before I get into the html of tables, let's take a look some important appearance tags. The <body> tag sets many preferences for our page's looks. It takes several attributes and can look like this:

```
<body bgcolor="#000000" text="#ffffff"
link="#ffffff" vlink="#ffffff">
```

The values of each of the attributes contain RGB values in hexadecimal: #000000 is black and #ffffff is white. Starting from the left, bgcolor is set to black and the text, links and activated links are set to white. If you want to have a background image instead of a plain colour then replace the bgcolor attribute with background="/gifs/back.gif". This works just like the src="" attribute in the <img> tag.

One more useful tag is <font size=value> – the values can be from 1 to 7 with 3 being the default. So to make your font smaller use values 1 or 2 and to make it bigger use values 4 to 7, simple! For other tags I suggest that you take a look at the Netscape site (http://www.netscape.com). There is no point on my listing any of the more obscure tags when you can go and look for yourselves.

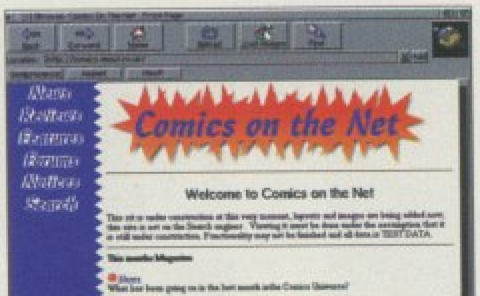
FORMATTING

To start a table use <table> and to close the table use the corresponding close tag </table>. The guts of the table is made up of rows and columns. To make a 2x2 table with each cell consecutively numbered, start with the top left, work across to the right and then repeat for the next row. Row tags are <tr> and </tr>; column tags are <td> and </td> or <th> and </th> (bold and centred table header tag), so our HTML 2x2 will be:

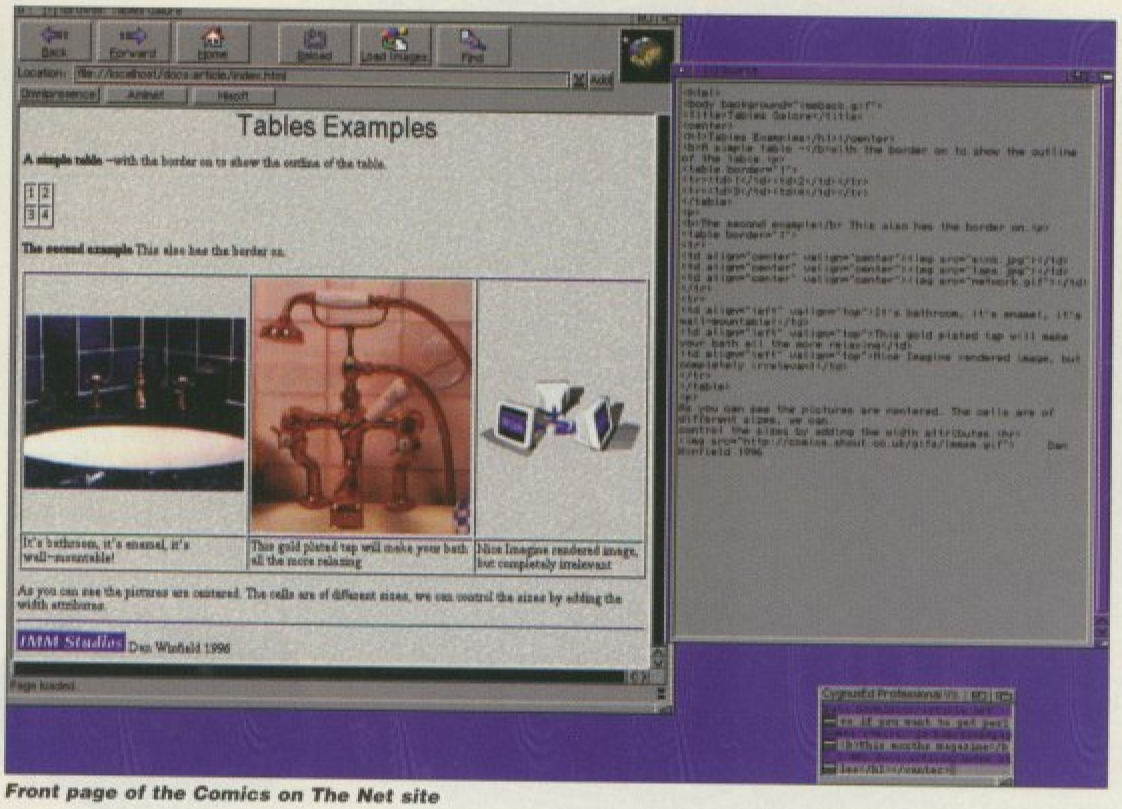
```
<table>
<tr><td>1</td><td>2</td></tr>
<tr><td>3</td><td>4</td></tr>
</table>
```

COOL THINGS TO DO WITH TABLES

Something that you now see a lot of on the web is a page with a margin of colour down the left side. The main body of the page is on the right with images down the margin. This is best formatted with a table, the left side is <td width="120"> and the right is <td width="470">. This can be a way to make your pages a bit more interesting to the eye. Another thing I use tables for is for menus of images. I can control the spacing between different sized image to give a tidy menu bar.



The tables examples, as displayed by Ibrowse 8a



Front page of the Comics on The Net site

I have formatted the HTML to look a bit like the table, this makes it more readable. This isn't a big table so this is easy to do but it is always good practice to organise your table HTML in some way so that changing or reading at a later date is possible. It also makes excellent HTML always to put in the closing </tr> and </td> tags. Without, it may display OK on the browser but should you master HTML and move on to CGI programming to control your HTML things will be a lot easier if you are sure of its format.

We have now made the most simple and pointless table. To customise this we can add various attributes to the tags. The numbers in our table appear to be uniformly spaced – that's because they are the same size. Now suppose we had a real life need for a table. Let's say I have three pictures and want to arrange them in a row with corresponding text under each one.

It is possible to use most HTML tags in a table cell – just imagine that each cell is just a smaller area in which you arrange your HTML. It is even possible to nest another table in a cell, but you should only do this if you really have to! To put an image in the table is simple as you can see below:

```
<table border="0" cellpadding="0" cellspac-
ing="0">
<tr>
<td align="center" valign="center"><img
src="/gifs/sink.jpg"></td>
<td align="center" valign="center"><img
src="/gifs/tap.jpg"></td>
<td align="center" valign="center"><img
src="/gifs/network.gif"></td>
</tr>
<tr>
<td align="left" valign="top">It's bathroom,
it's enamel, it's wall-mountable!</td>
<td align="left" valign="top">This gold plated
tap will make your bath all the more relax-
ing</td> <td align="left" valign="top">Nice
Imagine rendered image, but completely irrele-
vant</td>
</tr>
</table>
```

What have I done? Not only have I added the images but I have also put in extra bits and pieces. Firstly there is the border="0" attribute, that tells the web browser to put a border around the table of width 0. This is in fact redundant because if I remove it then there won't be any border, I have put it in because I can then change the 0 to 1 and see how the table looks with a border (See Picture). Have a go yourself with the above code.

Next have a look at the adapted <td> tag. I have aligned the image to the centre of the cell both horizontally and vertically. This is useful when the images are of a different size which is most of the time. I have also formatted the row of text descriptions to start at the top left. The available options are left, right, top, bottom and centre, with align="" controlling the horizontal and valign="" controlling the vertical.

Now we hopefully have the hang of attributes let's have a look at some more useful ones you will need.

Controlling the width of a cell or the whole table can be very handy. You do this with the width="" attribute. To make a table of width 410 pixels <table width="410"> will do the job for you. Similarly, <td width="100"> will give you a table cell of width 100 pixels.

I normally find myself using this type of precision when I have two or more different sized images and need them to be spaced evenly.

You can also set widths to be a percentage, such as <td width="50%">. This lets the table expand and shrink as users adjust the window size of their browser.

The <table> tag can also take the attribute cellpadding="" and cellspacing="" attributes. Cellspacing is the gap between cells and cellpadding is the gap between the contents of the cells and the cell walls.

Finally, it is possible to make an individual cell span several rows or columns. <td colspan="2"> lets the cell span two columns and <td rowspan="2"> lets it span two rows.

That's enough for table attributes. It seems more are being invented daily such as different background colours for each cell. If you want to find out more, again have a look at http://www.netscape.com/. Currently Ibrowse supports everything I have mentioned in the tables tutorial.

• *Next month, I am going to start some cgi programming. This will be in perl, so if you want to get perl5.001 from Aminet in the dev/lang/ directory you can install and play around with it in anticipation.*

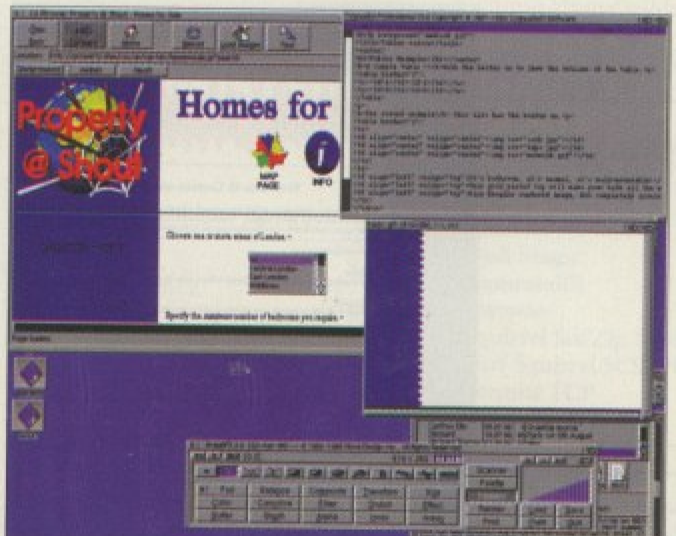


Image Fx, CED and Ibrowse. Amiga web tools in action

TABLES, BROWSERS AND PROBLEMS

Sadly when you try and control the size of the tables you may find that trying to be exact is very difficult. Netscape has a few annoying bugs that will make your Ibrowse designed pages look different.

This is because Netscape doesn't measure the width of the left column from where the background starts on the page. There is a gutter of varying length between each different platform version. The PC version is smaller than the Linux version for example.

Ibrowse however has no gutter and is by far the most accurate, but which is right remains debatable. Netscape can't even set a standard for itself so the best we can do is be aware of the problem.

Oh, by the way, when you set the width to be an exact amount and then make the browser window smaller on Netscape it squashes up the table. Ibrowse doesn't do this as it is sensible about its HTML interpretation.

To get around this problem I use a transparent gif of height 1 and width the same as the cell width. What a hassle, but the columns will stay the correct widths!

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Perfect pairing

Amiga and PC working in perfect harmony? Surely not. **Neil Mohr** looks at this strange mutant

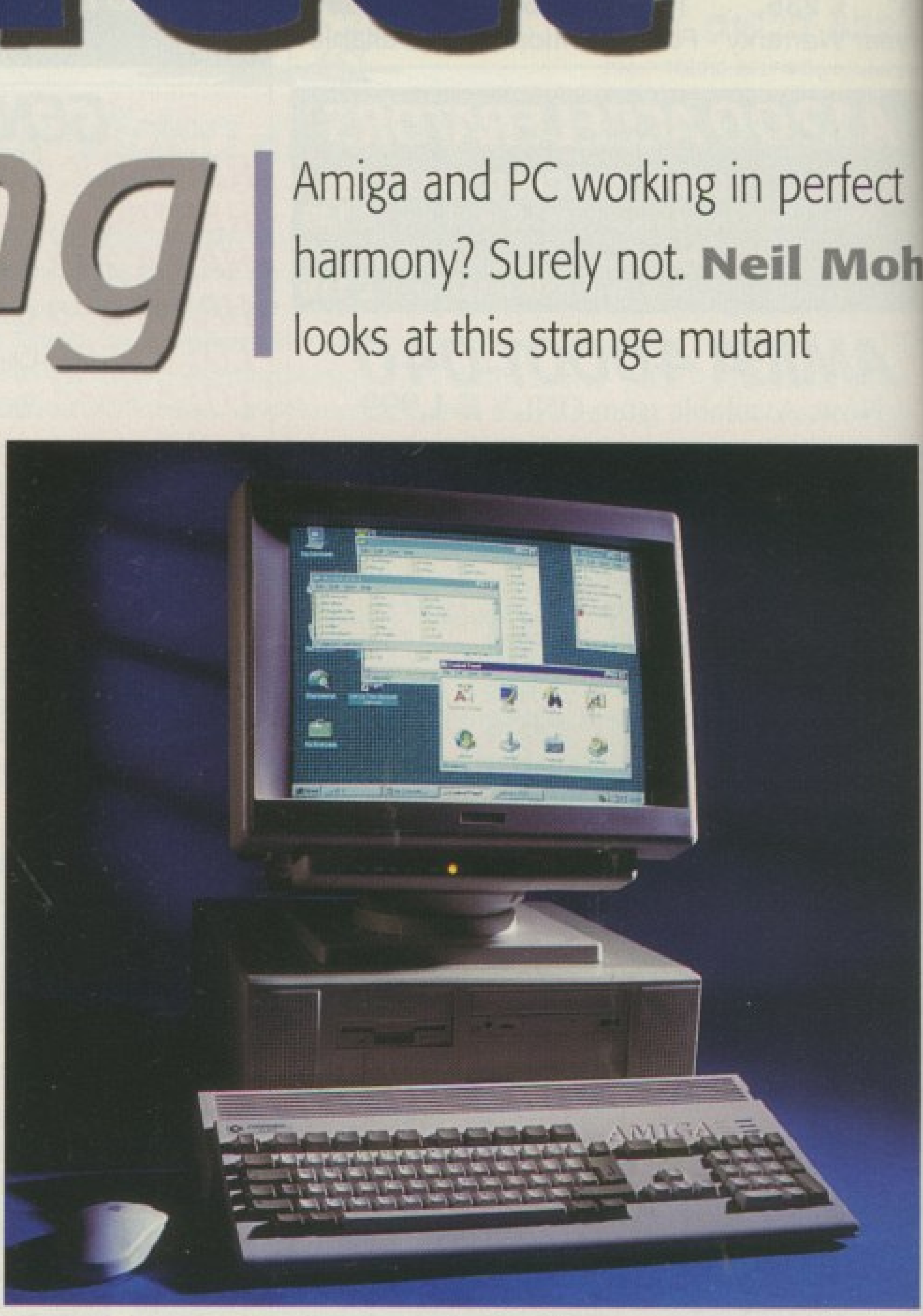
I think I must be one of the few people left in the country who doesn't actually own a PC. With even our editor having recently bought one, it is getting to the stage where I'm thinking, "A P120 would be quite nice to play Duke Nuke'em on". Well, for anyone who is in the same situation but needs or wants to keep easy access to their Amiga, HiQ has come up with a product which allows your PC and Amiga to share many of the same parts.

In essence, the Siamese system works in two separate sections. You have the actual Siamese board which basically acts as a monitor switcher. It is controlled by the Siamese software and pipes in the serial signals from the Amiga. Alongside this is a SCSI network on which your shared drives sit. Due to this setting up, the hardware side is done in two steps; one for the Siamese board and the other for the SCSI network.

The first steps in installing the Siamese system are done on your Amiga. Now, as both your Amiga and PC will be sharing the same monitor, you have to make sure the screen mode your Amiga is using works with your current monitor. If you do not have the luxury of a low-syncing multisync you will have to set your Amiga to run in a VGA-compatible screen mode. Your best bet is to use the Multiscan monitor driver along with the VGA-only driver, as this works at the magic 31KHz horizontal scan rate of a VGA monitor.

The Siamese board takes up a single ISA board in your PC. As I said earlier its main use is to act as a software-controlled monitor switcher, so once it is in your PC you route the Amiga's video output - using the supplied cable - to the Siamese board. The PC's graphics card output is also piped into the Siamese board, again with a supplied cable, and finally you can plug the monitor into the 15-pin connector on the Siamese board.

If you are not familiar with the innards of a PC (like me), the final part to setting up the Siamese board could cause a little confusion. It involves re-routing the PC's Comm2 serial port to the Siamese board and then using a 'replacement' serial port from the Siamese board. You then have to connect the Amiga and PC serial ports, again using a supplied cable. The serial cable is used to transmit the mouse, keyboard and other signal between each computer.



I came across a problem once I had finished fitting the Siamese board and was initially testing it. Due to the height limitations on ISA boards it was impossible for HiQ to fit the three 15-pin monitor connectors. Because of this the second video connector that takes the PC's video output is a round connector. Now, depending on your PC, the thick, black, plastic covering may stop the connector fitting properly and result in the PC video signal not being in sync. If this is the case all you have to do is cut four or five millimetres of this covering away and all will work fine again.

Once that is done the second half of the hardware installation involves setting up the SCSI network. In theory this should be a simple process. At the most basic level it would involve plugging an Amiga SCSI controller to

Tested SCSI devices

Amiga	PC
Oktagon 2008	NCR 810 PCI
DKB 4091	Adaptec1505 ISA
Surf Squirrel	Adaptec 1541
A4000T controller	Adaptec 2940
A3000 controller	

the PC's SCSI controller, and as long as both controllers had different SCSI IDs, all would be well.

In practice, SCSI controllers tend to use the SCSI ID number seven, so before you can get the SCSI network up and running you need to change either the PC or Amiga side's ID number. Currently, the two PC SCSI cards that HiQ guarantees to work do not allow you to change their SCSI ID's, so it is left up to the Amiga side to do the compromising. Luckily, most Amiga controllers do allow you to change their ID numbers either by adjusting jumpers on their boards or by using software such as the A3000 motherboard controller.

The only major exception is the Surf Squirrel, but to get around this, HiQ includes a replacement Squirrel device driver. Basically, you drop into the DEVS drawer and sets the Squirrel's ID to five. All this palava with ID numbers does mean that you will only be able to use up to six SCSI devices instead of the usual seven, but this shouldn't worry anyone apart from the real psycho SCSI users.

Once the SCSI controllers are set up, you next need to decide how you want your SCSI devices arranged. If you have a large PC box, it would be normal to add hard drives or CD-ROMs off the internal PC SCSI controller, but if you have a big box Amiga there is nothing stopping you from using this instead. For externally boxed or removable SCSI devices, such as a Zip drive, it is possible to connect drives 'in-between' the SCSI cards. As long as none of the SCSI IDs clash and the end of the SCSI chain is correctly terminated there should be no real problem.

So, you have the hardware side of the Siamese system all set, but this is not going to be of much use without the software to back it all up. The Siamese software comes on a single PC disk along with the CrossDOS 6 package, which makes mounting the PC drives just a matter of pointing and clicking.

Installation of the Amiga software is handled by a normal install script, leaving you with the simple task of dragging the SiSys program to your WBStartUp drawer. On the PC side you need to drag a drawer containing the Siamese software to the PC's C drive. By then dragging links to the SySis program to the Start button and StartUp drawer, you will have easy access to the software on the PC side.

The hub of the Siamese software is the main Server program, which passes messages between the machines over the serial cable for all the services that can be running on the Siamese system. The main function is to watch out for the user requesting the monitor switcher to kick in and switch between the two machines. On the PC side this is done using an Amiga sizing gadget that appears on the tool bar.

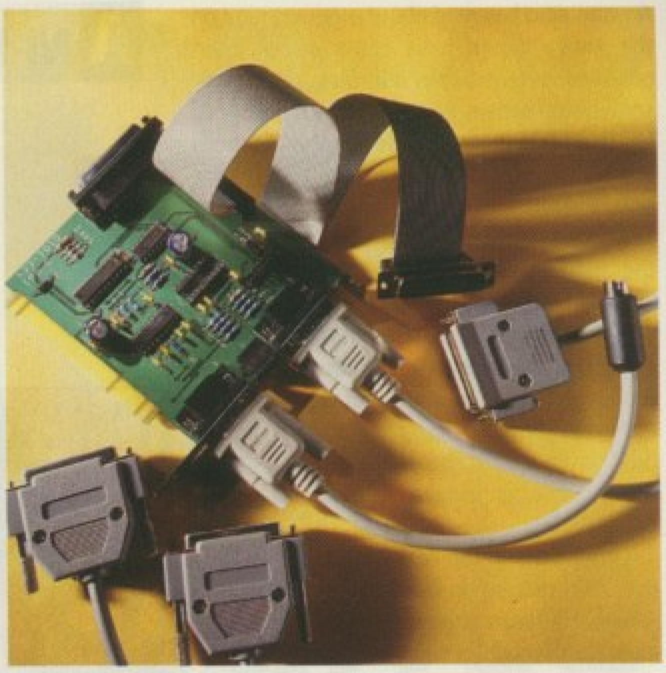
On the Amiga side there are a number of ways, including the most visible use of the Windows 95 button. You can also use the left Amiga C combination, and there is an optional ARexx port which has commands to give you total control over the PC. So, you can switch between the Amiga and PC screens and launch PC programs all from a single ARexx script.

Other basic functions provided by the server include mouse and keyboard sharing that allows you to use the Amiga mouse and keyboard while using Windows 95, or if you wish use the PC mouse and keyboard while using the Amiga. An incredibly useful feature is clipboard sharing that allows you to cut and paste between machines. Another handy function will update the Amiga's internal clock to match that of the PC's. This is helpful if your Amiga does not have a built-in clock.

The Siamese software is constantly being updated, and new additions include MountPC. This puts a new disk icon on your Workbench called PC. Opening this allows you to access all the drives mounted on the PC side of things, including floppy and CD drives. As this works over the serial lead it is nowhere near as fast as the SCSI network, but at least you have simple access to the normal PC drives not on the SCSI network.

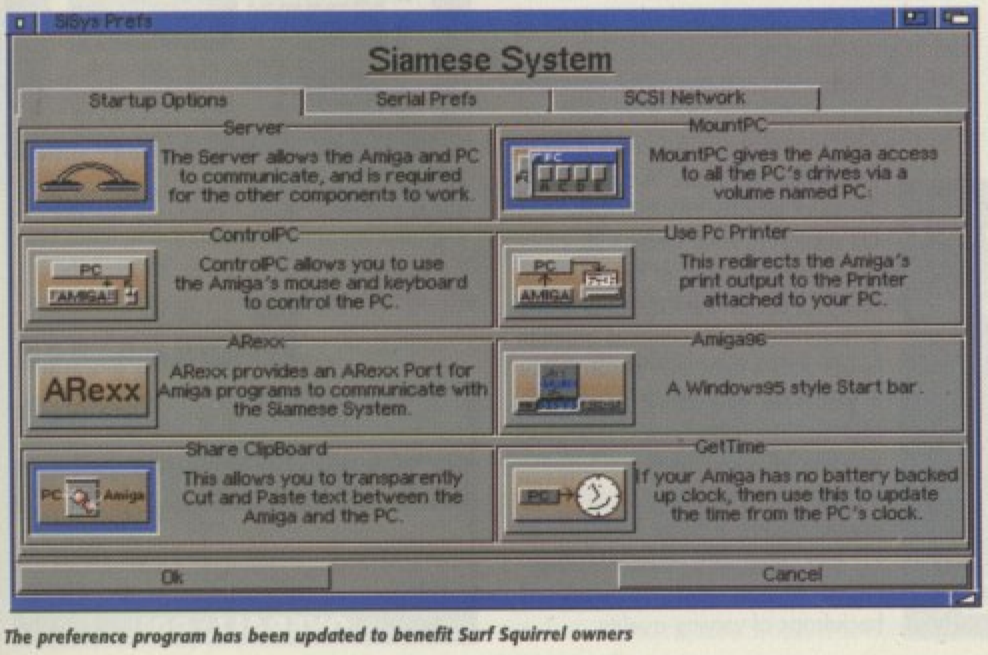
The preference program has also been updated and allows you to alter the serial device you want to use. As a result, Surf Squirrel owners will be able to take advantage of the higher transfer speeds.

Once you have everything properly set up, the Siamese system very quickly becomes second nature to use. Flicking between the PC and Amiga screens is just a matter of pressing two keys, and sharing files over the SCSI network is the same as loading and saving any other file.



The only potential problem here is with the two SCSI cards clashing over shared access, but on a shared monitor system this will happen very rarely, as both the Amiga and PC have to save to the drive at exactly the same time. If you are using decent SCSI cards they should arbitrate between themselves for access to the drive, so unless you have automatic processes running this should not be a problem.

I do have to say that I was a little hesitant at first about the idea of the Siamese system, but having used it for a few days you do start to forget you are using two separate machines. If you are put off by the possible extra cost of the SCSI network you should remember that this is actually not necessary for the Siamese system to work, as you can still have the monitor, keyboard and mouse sharing, along with MountPC. If you are only dealing with small files you could get along without the SCSI network. AC



The preference program has been updated to benefit Surf Squirrel owners

Bottom *line*

REQUIREMENTS

RED *essential*	**BLACK** *recommended*
PCI Windows95 PC	SCSI Card
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PRODUCT DETAILS

Product	Siamese system
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Tel	01908 261466

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Ease of use	**79%**
Implementation	**85%**
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Two specialist jam packed CDs get trawled through

by **Neil Mohr**

AMIGA DEVELOPER CD

Anyone who has read about programming on the Amiga would have come across references to certain books and files, particularly something known as the native developers' kit. This CD is the official developers' CD from Amiga Technologies and so has all the files and references you need.

One of the most important inclusions is the native developer kit. This has all the 'include' files and libraries you need to compile your operating system source code with either a C compiler or assembler. Along with these you also get an important section describing the best way to program for the Amiga and to maintain future compatibility.



Other parts of the NDK include the documentation for all the Amiga's libraries explaining what each function does and how you should use it. These are just plain text files but in a separate section the entire 'includes' can be referenced in AmigaGuide format making for quick access.

Included as part of the NDK is Enforcer an essential debugging tool that shows you any badly written programs which are accessing parts of the Amiga's operating system that they should not be touching.

Possibly of interest but not quite so much use nowadays is the complete CD32 developers' package that includes full CDXL reference material and utilities to build CD32 CDs.

A developers' section on the CD is interesting reading as it details what parts of the operating system could change in a future PowerPC operating system, and which functions you are best avoiding using to keep programs compatible.

There are also details of a TrackDisk64 which is an enhanced version of the trackdisk device written to remove the current 4Gb hard drive limit. Contributed by third parties there are the development files for Envoy from IAM and the INet files from Interworks.

For beginner programmers, on top of the large amount of example files that come as part of the NDK, there is AmigaMail – a bi-monthly magazine in which examples of Amiga programming are posted. These cover all aspects of programming including subjects covering how to write well-styled code that will be easily maintained and understood by other people.

Seeing that originally the native developers' kit was £22 to buy from Commodore this CD is excellent value for money and is an absolute must for would be Amiga programmers, giving invaluable advice and development files.

Bottom line

PRODUCT DETAILS

Product	Amiga Developer CD
Price	£14.95

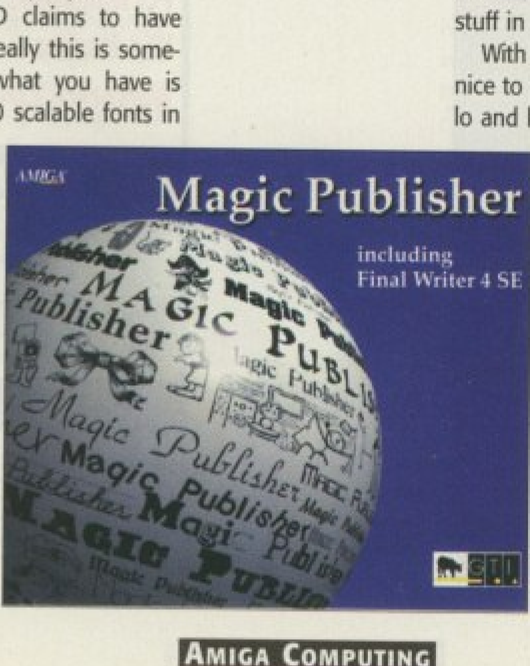
OVERALL: 91%

MAGIC PUBLISHER

The current CD market is awash with clipart and font CDs from the likes of Epic and EMC. So any new publishing style CD is going to have to offer something more than just another bunch of tired old collection of fonts and clipart.

Well Magic Publisher takes the view that bigger is better and is a whopping four CD collection. In reality you can immediately discard one of the CDs as it is for BBS users and provides lha'ed versions of all the fonts on the CD – handy but for a few people.

Talking of fonts, the CD claims to have 10,000 of the rascals but really this is something of a misnomer as what you have is something approaching 300 scalable fonts in five different formats – Bitmap, DMF, IntelliFont, Postscript and Truetype. To make life easier all these fonts are printed in the 108 page manual that comes with the CD collection.



On top of these is a huge collection of standard Amiga bitmap fonts along with a collection of colour fonts. Unfortunately there are no preview pictures, either on disk or in the manual so you will have to look at each one individually to find out what it is like, if you can be bothered.

Clipart is organised in a similar way to the fonts with printed previews in the manual corresponding to each file on CD. All the clipart is organised into separate drawers on the CD but even so a directory read can take a while on a slow drive due to the amount of stuff in each category.

With all these fonts and graphics it would be nice to have something to use them with and lo and behold one of the CDs is dedicated to publishing software. Along with a demo of Wordworth 4SE there is a full version of Final Writer 4SE.

A full installation of TeX is set up ready for use on the CD. TeX is aimed at scientific and technical manual layout as is a right pain to setup, but if you have ever come across DVI files then the utility ShowDVI is setup and lets you view them.

Also on the first CD are 150 printer drivers, a large collection of PD and shareware programs covering all of uses and a selection of backdrops of varying quality.



So you can try out all those fonts – a version of Final Writer 4SE is on the CD

Bottom line

PRODUCT DETAILS

Product	Magic Publisher
Price	£49.95

OVERALL: 90%

ARexx for beginners Part 4

Command performance

More useful info for newcomers to ARexx from **Paul Overaa**

The macros that we were talking about last month consisted of just a few lines of code. Whatever needed doing was achieved by having the various ARexx or program interface commands executed either one after the other or, in the case of the last example, by using a loop arrangement to have a series of instructions repeated a given number of times. This approach is fine for small scripts, but as programs get larger it becomes increasingly more difficult to keep track of what your code is doing if it is written in what is effectively a single block of instructions.

The solution is to break down whatever it is you are trying to do into more easily understandable (smaller) tasks, tackle these smaller coding jobs in relative isolation, and then finally build your script out of these program building blocks that you've created. The benefit of this is that whilst writing or debugging (trying to fix) your scripts, you then only ever have to deal with small sections of code at any one time!

The building blocks that I'm talking about are called ARexx functions, and they are self contained pieces of code that, given some information, will act on it and return some kind of result to you. The easiest way to explain the purpose and layout of an ARexx function is to take an example:

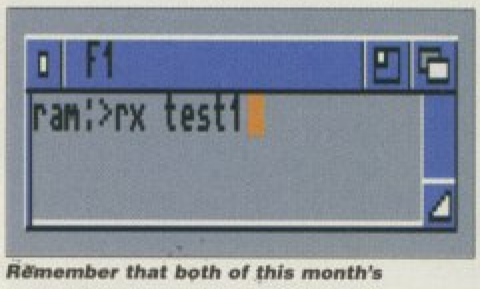
```
BoxVolume: Procedure
arg width, height, depth
volume=width*height*depth
return volume
```

This is the definition of a function called BoxVolume(). I've placed parenthesis markers () at the end of the name when mentioning it because it's normal practice to do so when talking about function names (most functions need information to work on and, as you'll see shortly, these parenthesis markers are needed when the function is used). Do notice, however, that in the function definition itself the name ends with a colon. The PROCEDURE keyword which follows the function name is optional but is normally included because it tells ARexx that all the variables used inside the function should be regarded as local, i.e. should be isolated from other variables in the script.

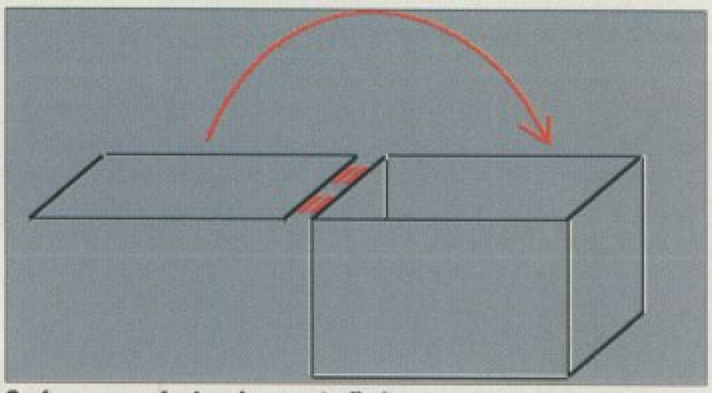
The data items required by a function are called the function's 'arguments', and with ARexx these are specified using an ARG statement which lists the variable names that have been chosen to hold the supplied arguments. With the example definition, three arguments are expected and the variable names chosen are width, height and depth.

Immediately after the ARG statement comes the ARexx statements that do the real work of the function. With BoxVolume() we are just multiplying the three function arguments together and assigning them to a variable called volume.

The last line of the function definition is a RETURN statement and this is important for two reasons: Firstly, it signifies the end of the function definition. Secondly, the variable or expression supplied with this statement determines the value that will be returned by the function when it is used (in our example this will be the current contents of the volume variable).



Remember that both of this month's examples need to be run from the Shell using the RX command



Surface area of a box is easy to find

```
/* ------------------------------------------------------------ */
/* test1.rexx */
/* ------------------------------------------------------------ */
/* first collect details from user... */
say 'what is the width of the box?'
pull w
say 'what is the height of the box?'
pull h
say 'what is the depth of the box?'
pull d
say 'metal-price per unit area?'
pull metal
say 'hinge price?'
pull hinge
say 'required % profit?'
pull profit
/* ------------------------------------------------------------ */
/* now calculate box price... */
say 'The price of the box is' BoxPrice(w,h,d,metal,hinge,profit)
exit
/* ------------------------------------------------------------ */
BoxPrice: Procedure
arg width, height, depth, metal_price, hinge_price,percentage_profit
area=2*(width*height+height*depth+width*depth)unit_cost=area*metal_pric
e+2*hinge_price /* remember - two hinges are used */
selling_price=unit_cost*(100+percentage_profit)/100
return selling_price
/* ------------------------------------------------------------ */
```

Listing 1: This standalone script shows one way of using the BoxPrice() function

```
/* ------------------------------------------------------------ */
BoxPrice: Procedure
arg width, height, depth, metal_price, hinge_price,percentage_profit
area=2*(width*height+height*depth+width*depth)
unit_cost=area*metal_price+2*hinge_price /* remember - two hinges are
used */
selling_price=unit_cost*(100+percentage_profit)/100+0.0001
decimal_point_position=Index(selling_price,'.')
numeric digits decimal_point_position+1
selling_price=selling_price+0
numeric digits 9
return selling_price
/* ------------------------------------------------------------ */
```

Listing 2: The improved BoxPrice() function

FUNCTION USE

Once you have created a function definition, using it is easy. If you want the returned value to be assigned to a variable you simply write the function name on the right-hand side of an expression, placing the argument values you wish to use inside the parenthesis (separated by commas) like this:

```
mybox=BoxVolume(2,4,5).
```

On the other hand you can use the returned value immediately:

```
say BoxVolume(2,4,5)
```

In the first case, the variable mybox would be loaded with the value 40 (i.e. 2*4*5), and in the second case the value 40 would be displayed.

It's worth pointing out, incidentally, that although, for clarity, the results of multiplying the three arguments was assigned to a separate variable we could, in the case of this simple function, do away with the intermediate multiplication statement and write the function in this form:

```
BoxVolume: Procedure
arg width, height, depth
return width*height*depth
```

TACKLING SOME PRACTICAL SNAGS

If you run the test1.rexx script (which you'll find on the cover disk), you'll find that it does its job well enough in most respects – but there is one minor difficulty in that the resulting box price often comes back with too many (or too few) significant figures. BoxPrice(2,4,2,1.8,0.75,25), for example, produces a price of £91.875 when in reality we'd probably want to round this up to £91.88.

Now REXX, the language upon which ARexx is based, actually has a built-in Format() function which allows the layout of the final character string used to represent the number to be modified. ARexx doesn't, but it does have plenty of other ready-made (or so-called built-in) routines that we can use, including an Index() function that allows us to search a text string for particular characters or groups of characters. It also provides a NUMERIC DIGITS statement that allows us to adjust the precision used when performing mathematical operations.

The thing you need to be aware of at this stage is that ARexx, when it isn't actually doing calculations on numbers, stores them as a series of characters, much like it stores pieces of text. Because of this we're able to search the selling_price variable used in our BoxPrice function and locate the position of its decimal point like this:

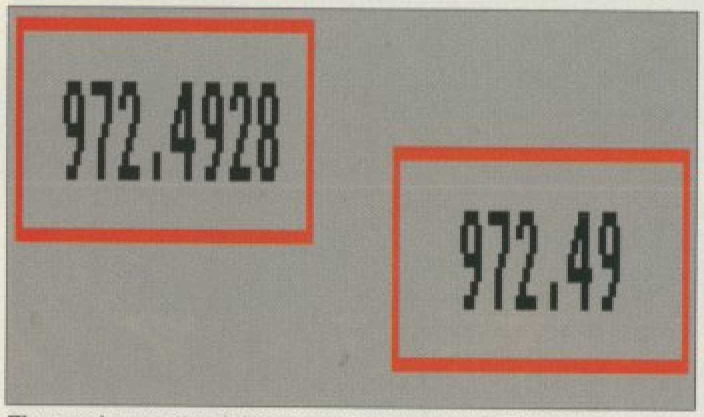
```
decimal_point_position=Index(selling_price,'.')
```

Subtracting 1 from the resultant value tells us how many digits are in front of the decimal point and adding 2 to this produces the numeric precision needed to provide two decimal places in an answer. Taken together this means that we can make ARexx provide 2 decimal place accuracy like this;

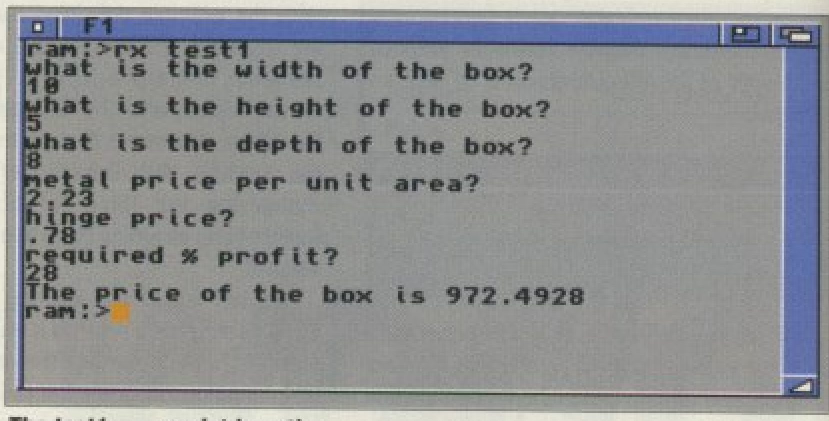
```
numeric digits decimal_point_position+1
selling_price=selling_price+0
numeric digits 9 /* reset to ARexx's default value */
```

The reason for adding zero to the selling price is simple. For the new accuracy setting to take effect we must perform some kind of mathematical operation on the number we wish to modify. Adding zero was chosen simply because it doesn't change the value of the result!

Another minor hitch that you'd discover with these latest modifications is if the selling price calculated by the BoxPrice() function turned out to be a whole number – then there wouldn't be a decimal point present in the selling_price variable. In this case, the Index() function would return a value of 0 (indicating that a decimal point was not found). There are a number of ways to get around this but I'm going to use a trick – by adding a small amount to the calculated selling price I'm going to force ARexx to add a decimal fraction part to the answer. Needless to say, the amount added needs to be small enough not to affect the overall result of the calculation and, since results are being rounded to the nearest 0.01, I've opted to add 0.0001. You can see the modified BoxPrice() function in listing 2 and there is a test2.rexx script on the cover disk that uses this improved function.



The number on the right shows the improved test2.rexx output



The test1.rexx script in action

A MORE REALISTIC EXAMPLE

Having sketched out the layout of a simple function, let's take a more realistic example of where a function might be created to do a particular job. Let's suppose you work for a company that makes hinged-lid metal boxes to order, and that the price of these boxes depends on the amount of metal in any given box plus the cost of the hinges. It's your job to provide quotes for customers, so you want an ARexx macro that will be able to calculate a customer price for any particular box.

What information is going to be needed? Well the dimensions of the box, the price of the metal per unit area and the price of the hinges will be needed to work out the cost of making the box. And a profit margin will have to be available to calculate the final customer price.

Calculating the surface area of a box is straightforward – you just calculate the areas of each side and add them together. Having got the total surface area of the box, we simply multiply this by the cost of the metal per unit area, add on the price of a couple of hinges, and scale that price up to account for the profit margin. Here's a function that will do the job;

Quite a few variables in use I know, but the basic purpose of the statements in each of the steps should be reasonably easy to understand. Using the function is just going to be a matter of supplying the various details when the function is called. For instance, to calculate the price of a box 2 ft x 4 ft x 2 ft with metal costing £1.8 per square ft, hinges £0.75 each and a profit margin of 25 per cent we'd use an expression like this:

```
price=BoxPrice(2,4,2,1.8,0.75,25)
```

Now one way of using this function would be to write a standalone script that collected the various details of the box and then called the BoxPrice() function to carry out the calculation. The test1.rexx script in listing 1 shows how you could do this and notice how comment lines written as /* ——— */ have been used to separate various parts of the script. The EXIT statement that occurs just before the function definition, incidentally, is essential because it tells ARexx that this is the 'logical end' of the script – without this ARexx would carry on executing the script, trying to use the statements present in the function as though they were part of the main script.

```
BoxPrice: Procedure
arg width, height, depth, metal_price, hinge_price, percentage_profit
area=2*(width*height+height*depth+width*depth)
unit_cost=area*metal_price+2*hinge_price /* remember - two hinges are used */
selling_price=unit_cost*(100+percentage_profit)/100
return selling_price
```

AND FINALLY

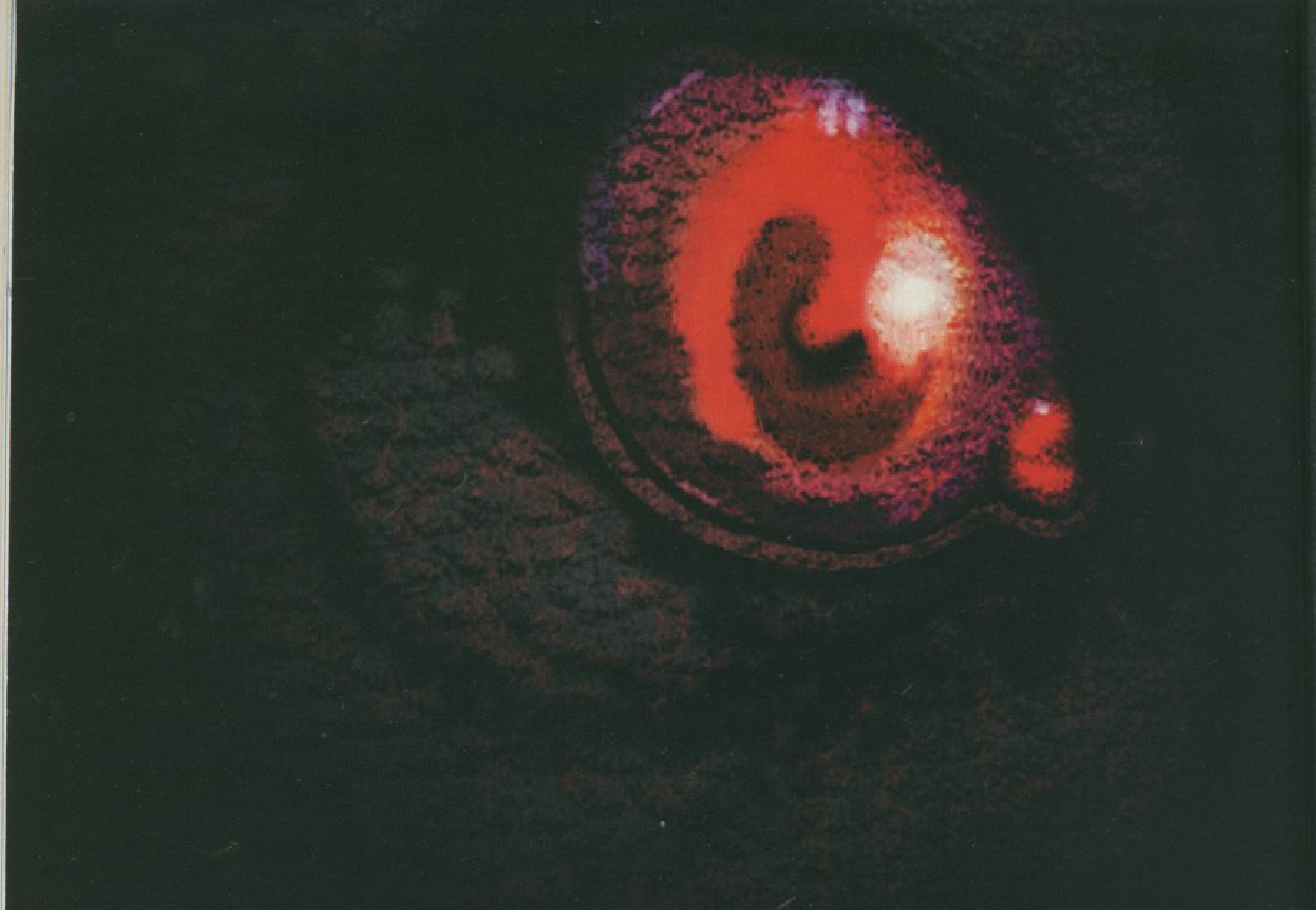
There are all sorts of ways in which our newly devised function could be used. Suppose, for instance, that you wanted to produce a table which showed the prices needed to obtain various profit margins on boxes of a particular size. Your script could collect the dimensions and material costs in much the same way as the test1.rexx program, but could then use a loop to generate a % profit versus selling price table for margins between 1% and 50%:

```
do profit=1 to 50

price=BoxPrice(w,l,d,metal,hinge,profit)
        say 'percentage profit' profit
'would need selling price of' price
end
```

The real fun, however, starts when we collect the information needed by the function directly from a document being edited using an ARexx controllable editor or word-processor.

Next month I'll be explaining how this function that we've written could be used in a macro that reads required BoxPrice() arguments in this way but then inserts the function-calculated box price back into that same document!



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C·L·I·C·K
BOOM

By Andy Maddock

Justice at last

Recently we heard that a brand new, amazing game called Justice, which looks a bit like Syndicate, is coming out very soon for the Amiga.

It requires you to control special law-enforcement officers who are ordered to blow away any criminals on the spot. However, to spice things up a little, you're allowed to use tanks and bazookas among various other military.



As you can see, Justice looks remarkably like Cannon Fodder...

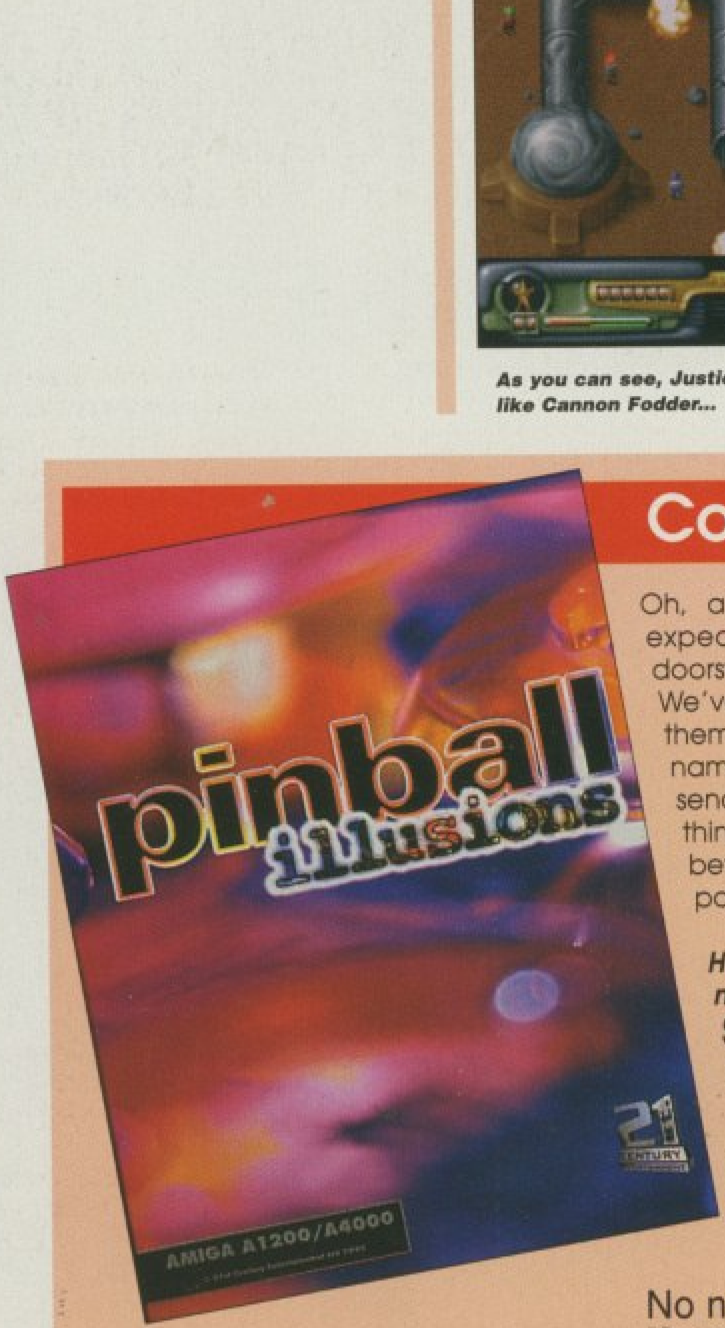


... maybe with a dashing of Syndicate

The game is being developed in Sweden by a team called Silicon Cactus and as you can see from the screenshots, it looks like a cross between Syndicate and Cannon Fodder.

Hopefully we'll be able to give you more information on it soon.

Compo Winners (At last)



Hooray, we've finally managed to dig out some competition winners after months of searching. Remember the competition we set about two months ago with those eight sets of Pinball games? Well, you'll be pleased to know every single one of them was nicked from our office which means everyone who entered will win absolutely nothing.

No, seriously, we were inundated with entries, (I think we counted 10) which is quite rare and we can happily announce the winners names right now along with their tie-breakers.

Oh, and if you are a winner don't expect your prizes to be on the doorstep as soon as you read this. We've got to find the games, plaster them up with packaging, scrawl your name and address on them and then send them out by 3rd class or something ridiculous so they'll get to you before the next millennium, so be patient!

Here are those all-important winners!

Steven Gurevitz, Middlesex

"I need refuge from my Dad. Please help me and send relief."

(I'm not entirely sure what he means, although I've enclosed NSPCC's telephone number)

No name, or address

"Because I am a poor, dull person..."

(This person didn't print their name or address on their entry form. If that person would like to write to us with their finished tie-breaker, just so we know it's you, then we can send you your prize!)

Scott Hughes, Liverpool

"Because I'm a ball breaking, chute shooting, light flashing, bumper bashing, number crunching, bonus breaking, table tilting, pinball wizard."

(Ooh Scott Hughes, you cheeky monkey. You provided us with the best entry which means you win the same prize as everyone else. Congrats!)

Pete Pointon, Walsall

"I am a tarnished ball on the pinball table of life."

(A very bizarre tie-breaker from Pete there)

Mr N Crump, Wrexham

"To give me a break from my sons watching and talking about Euro'96."

(We feel you're being a little harsh there Mr Crump, but never mind, you still win by default as someone else ridiculously scrawled on their entry form and we found it impossible to figure it out)

Mr C Cotton, Northants

"Because I'm a sad old fart who wants to re-live his misspent youth in the pinball arcades."

(Yep, we know.)

Ian Sherwood, Oxon

"I'm a member of the National Pinball Defence League and would play them until they are ready for release."

(Right you are my son)

Terry Everest, Kent

"Doubtless you'll cast this hopeless entry into the infinite wastes (or bin). But remember, I'm asking you very nicely. Please.

(Yes, in fact we did throw your entry into the bin, but hey, everyone is a winner with System!)

Ooh, it's an Amiga-fest



The ECTS is coming up really fast now, and we're hoping there's going to be lots of Amiga products on show. The show runs from 8th to 10th September and unfortunately it's not open to you, the public. Although after you have read our in-depth report in a few months, I can guarantee it will feel as if you were really there!

To be honest, the show will be dominated by the PC and Playstation goodies so er, us lot here will have a top time playing on all the latest console and arcade games. No truthfully, we'll be too busy hunting down all the latest Amiga products from companies such as Guildhall Leisure, 21st Century Entertainment, Acclaim, Gametek, Gremlin Interactive, Ocean and Time Warner.

You comin' out or wot?

Do you remember that shoot 'em up by OTM Publications and Promotions called Atrophy. Well we've just heard news that it's never coming out. The reason is that it has now been shelved due to contractual problems. Well, at least it managed to live up to its name.



This isn't coming out. So don't look for it in the shops.

However, do not despair. In its place comes an even better horizontal shoot 'em up going by the name of Atrocity, and it's planned to be even better than Atrophy. We should have something on it for you next month...; providing OTM don't scrap it two minutes before our deadline.

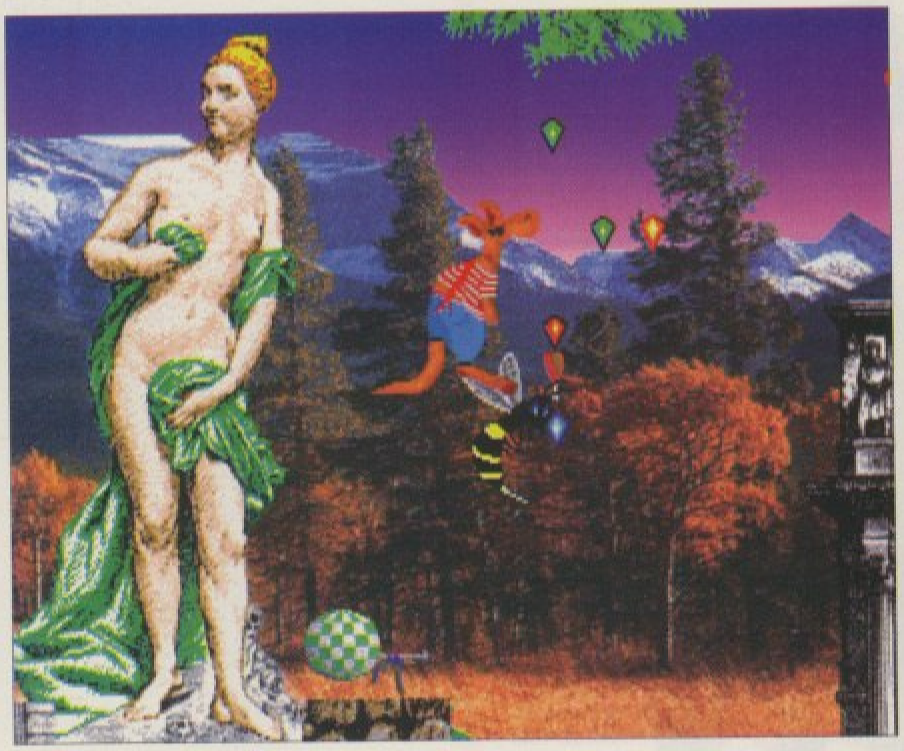
Atrocity should feature:

- 6 meg of music
- 6 Giant levels
- 5000 frames of animation
- 60+ Objects on-screen at once
- 300 colours on screen
- Intelligent aliens
- No slow down
- Multi-layer, parallax scrolling

The Human Enigma

Oh, hang on, some news has just come in from the fax machine as I speak and it's about a new game in the pipeline from OTM and it is entitled Enigma. It is being developed by a team called Centillion Software and looks rather good.

Get your football boots ready for our ultimate footy guides inside



Kang-Fu certainly looks original



The cockerels are quite odd so weave your way past them

Kang-Fu

Previewed by Andy Maddock

Good platform games have always been a rarity on the Amiga. There was once Superfrog, Zool and Fire and Ice. Although they weren't particularly ground-breaking in any department, they were just a joy to play. Just recently, we've had absolutely nothing in terms of decent platform games.

However, not for the first time, a brand new software company get their chance to put the world to rights with their latest release. And if originality determines success then Great Effects Development could turn out to be outright winners.

We managed to stumble across the developers of Kang-Fu one Friday morning and within a week the game was sitting on my desk – that's how eager they are to broadcast their plans.

The first obvious thing that struck me was the fact it was on CD!. The last half-decent game on the CD32 I remember was Littil Divil by Gremlin Interactive. So I had to go through the rigmarole of finding our CD32 dusting it down and then setting off on a quest to find a working power-pack.

After a good few days of searching I was all set to play the one-level demo of the brand new platform game, Kang-Fu.

The developers go behind their label of Great Effects Development although you may have heard of them as 'Greed' which looks lik bizarre abbreviation.

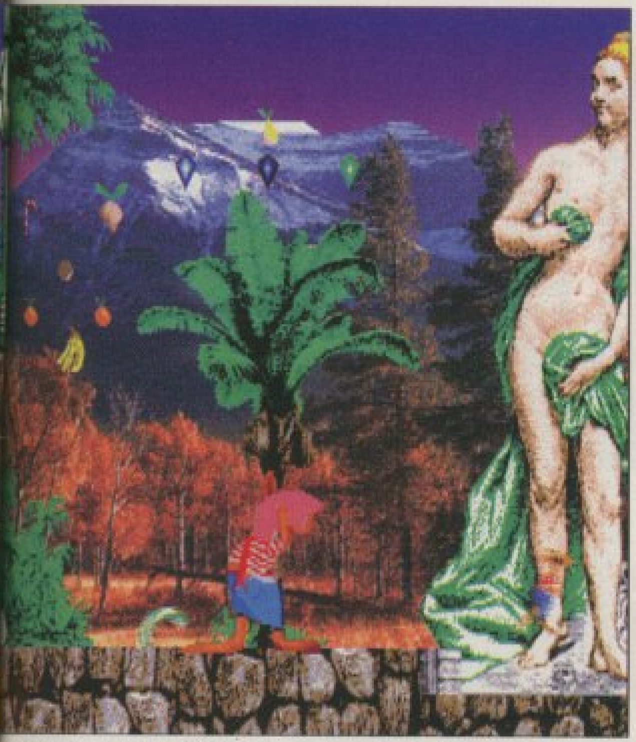
You are in control of a Kung-Fu-kicking kan roo called Klont, and your job is travel around world rescuing all the baby kangaroos that oc sionally get lost. This is quite obviously a comm scenario - especially here in Britain.

During your quest for success, you will co across loads of other insects and objects that take delight in stopping you. You will also be a to pick up various power-ups to give you o weaponry apart from your trusty left foot.

In the final game there will be 10 levels ea with their own graphics and enemies.

My first impressions were actually quite good the main sprite was really chunky and insta reminded me of a cross between Sonic Hedgehog and Zool on the Amiga. Another th which instantly struck me was the number sprites on-screen at once. There seemed like h dreds, although to be honest, the backgrou screens tend to merge in giving an impression a very busy playing area.

The main object of a platform game is usu to get to the end of the level unscathed. Kang once again goes against the grain by requi you to pick up small kangaroos which fol behind you confusing things even more. A that's not all, you have to solve puzzles on y



Klont has the job of rescuing baby kangaroos



way too, like finding keys before you get to the exit. And when you do get to the exit you will have to battle against some huge end-of-level guardians which are reminiscent of the old console days.

The final game will feature HIRes bitplane graphics, thousands of colours on-screen, it will run at 50fps, there will be 40 minutes of proper CD quality audio and overall around 80Mb worth of data on the CD itself. We'll have to see if Kang-Fu can really live up to platform game standards such as Sonic and Mario across other formats.

Overall, the graphics seem pretty polished with the gameplay to match. However, the version I played didn't have any sound but I could imagine the types of sound effects coming from the wasps, cockerels and dragons – the opportunities will be endless. We'll have a full review next month. You can be sure of it.

Some Cheese Please

You can contact the Dutch developers to get some more information if you wish. I'm sure they'll be happy to answer any questions. You can reach them on +31 546 817727. So, go on, get in touch.

Baddies



Wasps

You have to be careful around wasps because they will manoeuvre in a circular movement giving you little space to work in especially when you need to get across a platform

Dragons

The dragons don't pose too much of a threat as they just stand there with big axe trying to chop the life out of you. Just try to get on platform above them



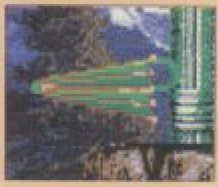


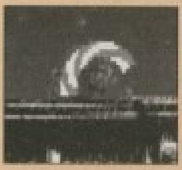
Cockerels

The cockerels will just run about making noises which don't seem to harm you at all. So, er... just avoid them anyway because they're off their heads

Flying umbrellas

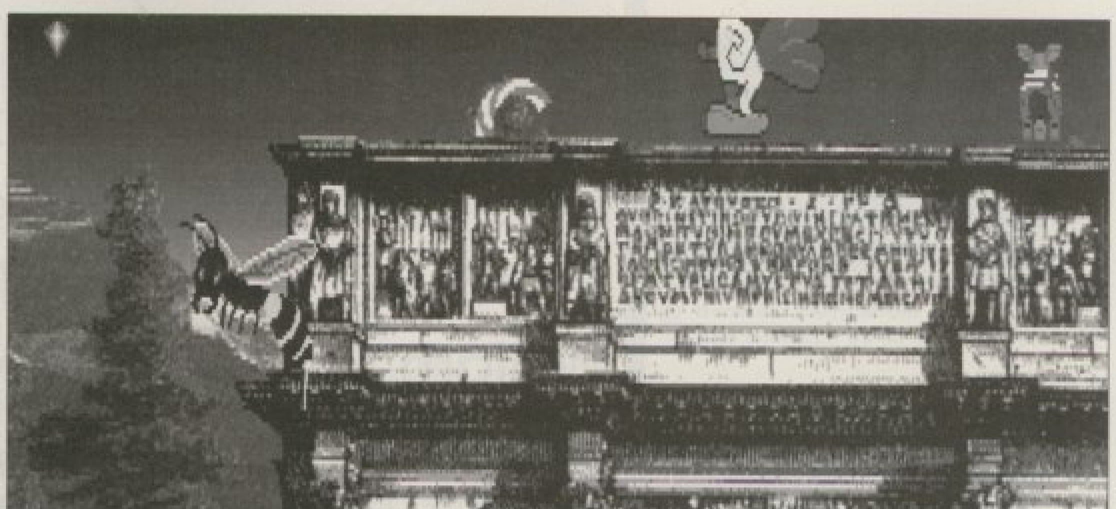
The flying brollies will take delight in flying into you, almost piercing your body. Well, not quite, but you get the picture





Weird things

You will undoubtedly encounter many other weird things like bendy objects rolling about for no apparent reason. Just thought I'd let you know.



On your travels you will meet many other animals who will try to hinder your progress



I think he's supposed to be one of those Laudrup brothers. I don't know which one



I personally hat the Serie A becasue half the time you don't know who anybody is



Both Milan's are firmly at the top of the attendance league

Championship Manager guide

By Andy Maddock

With **Championship Manager 2** just around the corner, we feel it's time to finish with the old, now out-of-date, **version 1**. We here at System, along with special help from Championship Manager king **William Sapsed**, show you how

First of all, to gain loads of cash right from the start, all you have to do is choose your team as Tranmere Rovers and type your name in as 'Mr Bulgaria. All you have to do then is choose your character as arrogant. Once the game begins you will find your bank balance has increased by nearly £20 million pounds, although some of the players will hate you. Typical.

If you start the game with a pretty small side, such as second or third division, you will have an absolute nightmare trying to buy players which are currently wanted by clubs such as Manchester Utd, Newcastle and Blackburn, and the chances of getting them are very remote unless...

First of all you need to bid less than the other clubs on two occasions, and then on the third offer one more pound than every other club (providing you have the money), and you will secure the player. Okay, so you're still having to fork out for decent players, but at least you don't have to worry about the competition.

One of the problems that can occur, especially during the end of a season, are player retirements. This can lose your team a lot of ability, especially if he's one of your top players. The only way to get around this is to get loads of money from him so you can just about afford a replacement.

When he's about to retire, put the player on the transfer list and then fine him for no reason. Now take him off the list and insure him for loads of cash. At the start of next season he'll have gone, but will have left a huge amount of dosh behind him.

Another handy hint is that when you are looking to buy 30+ players, put them on your scout's shortlist so when they retire at the end of the sea-



When dealing in the transfer market, always scout a player a week before, just to check you need him



Throughout the game you will be informed of injutires, suspensions, contract disputes, young players and job offers. You must act as soon as you see the notice as you are likely to lose a potential vote of confidence

Christmas tree

The best formation to work your team around is this:



Will's dream team

Finally, William Sapsed has included a list of all his favourite buys and even though they sound like Donkey FC, you shouldn't overlook them. All the players listed below will be 'good' in the Premiership, so lower division teams beware.

Alan Miller	Middlesborough	**Ian Bishop**	West ham Utd
Ian Walker	Spurs	**Ceri Hughes**	Luton
Stuart Pearce	Notts forest	**Alan Moore**	Middlesborough
Gary Mabbutt	Spurs	**Julian Joachim**	Leicester
Neil Lewis	Leicester	**Steve Brown**	Scunthorpe
John Dreyer	Luton	**Lee Power**	Bradford
Scott Oakes	Luton	**Lee Chapman**	West ham Utd

son (providing you carry out the ritual above), you will have a new name in his place. This new player will have different stats from the old one, but his injury proneness and goal scoring ability will remain. A must for all retiring strikers!

Don't be fooled by all the current transfer malarkey involving Alan Shearer either. If you apply Championship Manager to real-life, you'll notice he's about as good as Jason Lee. So there. I can remember I bought him to partner Liverpool's Robbie Fowler (before Stan), and he was absolute pants and hardly ever scored.

Effectively, you should use a 4-2-4 formation, with a forward dropping back and a defender sitting in front of the back three. All of your players should have stamina, although as a surprise, either at half-time or for a whole game, stick a decent defender at the anchor position and watch as he bangs in loads of goals. This worked especially well when I was Manchester Utd. I stuck Steve Bruce there and he ended up being top scorer for two seasons!

You should select your tactics as continental, too. Don't try to be all professional by choosing 4-4-2 because it's inevitable that you'll let loads of goals in unless your defence is amazing. Don't be afraid of switching to Direct Ball at half-time if you're a couple of goals down. There's nothing to lose.

The goalkeepers are a bit strange because they don't have much in the way of stats – the only one you can see is influence. Even though the idea is to select a captain who has the most influence, you will find that the goalkeepers who have a high influence will actually be really good.

If you do want a really good keeper, the guy from Bristol City is absolutely superb. He was my best buy and kept a clean sheet almost every game. His name's Keith Welch or something...



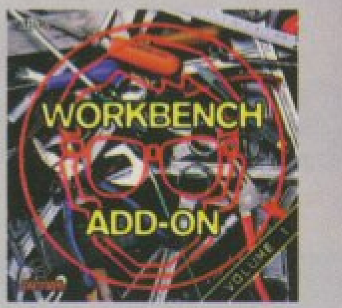
Good old Barry Butler want a new contract, go on sign it!



The half-time stats will give you an idea of your perfomance

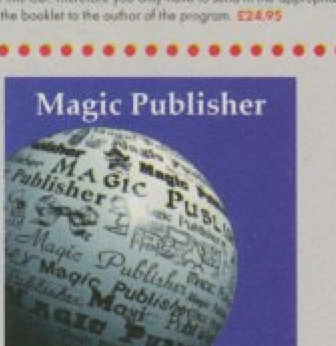


Here's another one of those players. I've no idea who he is



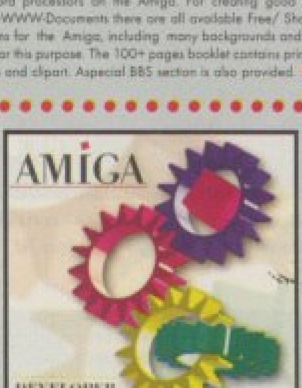
Workbench Add-On Volume 1

The Workbench Add-On CD-ROM is the ideal companion to your workbench. On this CD you will not only find the best programs, that are available for the Amiga, but you will also get them ready-to-run from the CD. In addition to this there is an installer script that installs the desired programs to your harddisk.
The CD covers all areas of interest, all, the programmer, the user, the creative and the gamer will find what they are looking for. On this CD-ROM there are many shareware programs, some of them at a special price, if you get registered. There is e.g. Shapeshifter for 40.- DM (instead of 50.- DM), in addition to this there is a 50 MB Mac partition, so that you can start playing around with Mac applications right away. Then there is PowerPlayer for 20.- DM (instead of 30.- DM), there are, of course, loads of modules with it, so that you can try it right away. AmiWin, the new X11-server for the Amiga is available for $40, instead of $50. You can sa ve more than 100.- DM with this CD. Therefore you only have to send in the appropriate page in the booklet to the author of the program. £24.95



Magic Publisher

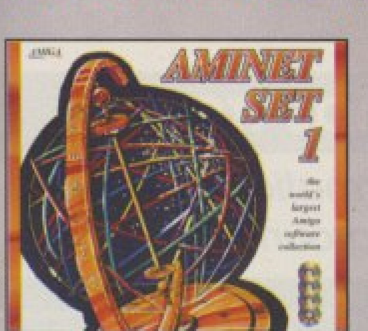
On this unique CD-ROM Set you will find all you need to create nice looking documents. If you want to write a book, if you want to design a poster, if you want to create WWW-Pages for the Internet or layout a magazine, all you need you will find on this marvelous CD-ROM. There are more than 10.000 Fonts (Colour Fonts, Bitmap Fonts, IFF-Fonts, Adobe Fonts, IntelliFonts, Truetype Fonts and DMF Fonts), more than 5.000 cliparts and 150 printer drivers. Many of these are exclusive to Magic Publisher. You will also find a complete installation of PasTex (more than 300 MB), containing all its fonts (upto 600x600 dpi). In order to create good looking documents, there is Final Writer 4 SE and Wordworth 4 TD. Both rated as the best word processors on the Amiga. For creating good looking Internet-WWW-Documents there are all available Free/ Shareware programs for the Amiga, including many backgrounds and special clipart for this purpose. The 100+ pages booklet contains printouts of all fonts and clipart. Aspecial BBS section is also provided. £49.95



Amiga Developer CD v1.1

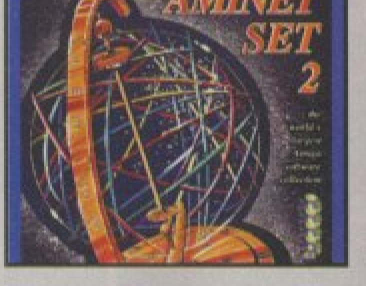
The official developer CD from Amiga Technologies contains all the material you need to start developing software forAmiga computers. This includes: The CD32 developer package. In addition to the original five disk set distribution you will find the "Build-CD" CD writer package Packages contributed by 3rd parties: The WBPath and ActionFSSM packages, courtesy of Ralph Babel; The Envoy v2.0 developer kit, courtesy of IAM, Inc.; The INet 225 developer kit, version 2, courtesy of Interworks, Inc.; The Kickometer package, courtesy of Angela Schmidt; The Enforcer v37.64, courtesy of Mike Sinz. Information in support of forthcoming operating system developments. Additional developer material: BOOPSI gadget and image classes; The AmigaOS 2.04 example code, as part of the original 2.04 Native Developer Kit; The RKM 2.04 code examples; The complete set of registered IFF forms; IFF example and stress test files; All IFF packages released by Commodore-Amiga, Inc., covering 1986 through 1992; The camd v37.1 MIDI developer kit; The SANA-II standard package and developer kit; The Installer v43.1 package. International support material: Sample text using the full ISO-8859-1 character set; Translation guidelines. The updated 3.1 Native Developer Kit: "C" and assembly language header files, linker and runtime libraries; System documentation and tutorial texts; Example code covering the Amiga OS 3.0 and 3.1 features; The NewIFF v39 package; The AmigaGuide and DataTypes documentation and example code. Reference material: The collection of AmigaGuide Volume 1 articles, covering Spring 1987 through January/February 1989; The complete AmigaGuide Volume 2 articles in AmigaGuide format, covering January/February 1990 through March/April 1993; also included are the printable issues in PostScript and PageStream format; Hardware related articles; The Includes & Autodocs in AmigaGuide format. £14.95

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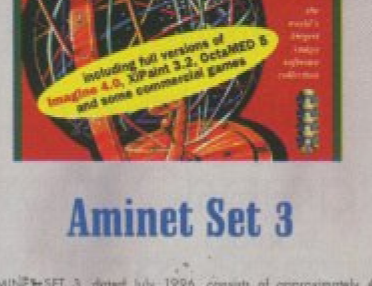
Aminet Set 1

Aminet is the world´s largest collection of freely distributable Amiga software. Up to 10.000 users access the vast archives ervery day and countless programmers publish directly via Aminet. Until recently access to Aminet was restricted to international network users. With Aminet Set 1, consisting of 4 CDs, the complete archive is published the first time. This CD-ROM-collection, which is dated January 1995, offers an almost inexhaustible reservoir of top-value Shareware. A wide variety of programs is included: Applications, Games, Demos, Pictures, Mods, Animations, Developer-Material, ... It contains approximately 4 gigabytes of software in 12.500 archives and you will enjoy the comfortable user-interface. £29.95



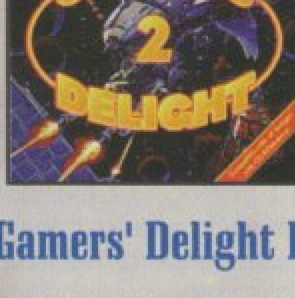
Aminet Set 2

AMINET SET 2, dated November 1995, consists of approximately 4 gigabytes of software in 12.000 archives. Whether you like applications, games, communications or programming, the SET gives you all you need. Easy to use index files and search facilities make accessing it a pleasure. £34.95



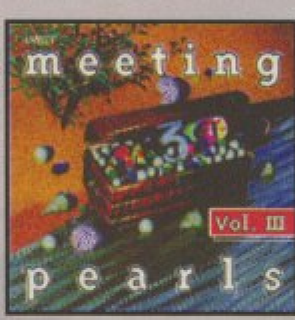
Aminet Set 3

AMINET SET 3, dated July 1996, consists of approximately 4 gigabytes of software in 9.000 archives. Also included are full versions of Imagine 4.0, XiPaint 3.2, OctaMED 5.0 and some commercial games. Whether you like applications, games, communications or programming, the SET gives you all you need. 95 MB Utilities, 79 MB Documents, 408 MB text software, 12 MB Disk/HD tools, 7 MB Hardware related, 756 MB Pictures & Animations, 208 MB Graphics software, 394 MB Graphics & sound demos, 563 MB Games, 64 MB Miscellaneous, 685 MB Music modules, 28 MB Music software, 131 MB Communications, 91 MB Development Software, 88 MB Business software. Easy to use index files and search facilities make accessing it a pleasure. £39.95



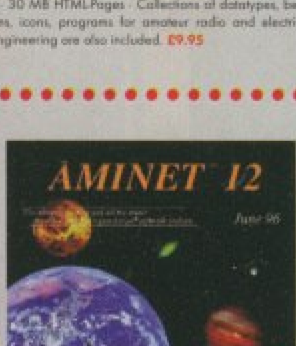
Gamers' Delight II

This CD contains 1070 games for the Commodore Amiga from differing categories. Action, Jump & Run, Card Games, Puzzles, Strategy Games - a whole range of computer entertainment awaits! Gamers' Delight will hold you captivated for hours and guarantees long-lasting pleasure. 70 games are commercial versions - no public domain & no demos! This CD can be run on any Amiga with CD-ROM drive,1 MB free memory and Joystick/Joypad. £26.95



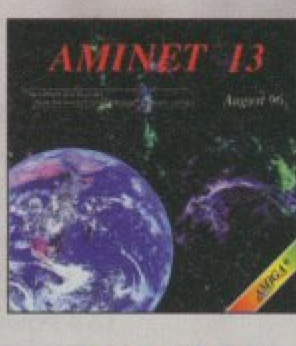
Meeting Pearls Vol. III

The Meeting Pearls Volume III contains 650 MB of the finest FD software via a special user interface, which has been created to allow you to find the program of your choice with ease. The contents: 10 MB Packer, Cruncher, Archive Programs · 3 MB CD-ROM Utilities · 21 MB Communication and Network Programs · 5 MB Debugging Tools · 29 MB Development Tools · 13 MB Floppy, Hard Disk and SCSI Programs · 8 MB Educational Programs · 9 MB Games · 35 MB Graphics Programs · 39 MB Internet Movie Database, Updated Version · 7 MB Midi Tools and Programs · 27 MB Mods · 12 MB Music Programs · 21 MB Pictures · 13 MB AmiTCP and more for Networking · 60 MB Documentation, CD-ROM Databases, etc. · 96 MB PasTeX 1.4 - not previous available on any CD-ROM · 15 MB Utilities · 30 MB HTML-Pages · Collections of datatypes, benchmark programs, icons, programs for amateur radio and electrical/electronic engineering are also included. £9.95



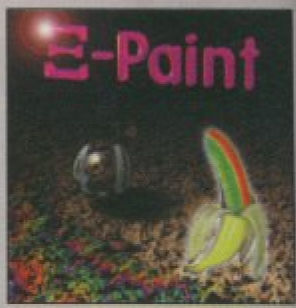
Aminet 12

Still available! £14.95



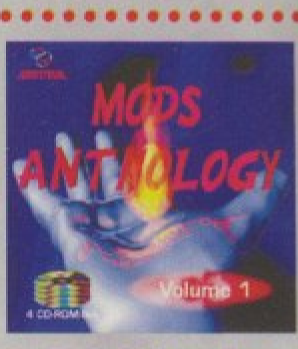
Aminet 13

Aminet CD 13, dated August 1996, consists of approximately 1,1 gigabytes of software in 2400 archives. Since the release of Aminet CD 12 more than 800 MB new software has appeared. The current edition has a special focus on animations, several hundred animations from the internet were included. User friendly access software makes the Aminet CD 13 a pleasure to use. £14.95



XiPaint V4

XiPaint 4 is the new version of the leading edge, 24-bit paint program. It's suited to the demands of novice and expert alike and within a short time, you too will be able to produce colourful and creative art in 16.8 million colours. This version of XiPaint features animations as well as easy-to-use raytracing-capabilities.
Overview of Features: · Diverse paint functions including colour, contrast and saturation adjustment · Mask, outline, recolour and functions · Airbrush with adjustable spray functions · Lighttable function for manipulating montages and animations · Text function with anti-aliasing using Compugraphic fonts · Support for a variety of graphic formats · Unlimited Undo · Diverse manipulation of alpha channel · Supports many graphic cards · Layers to combine different projects · ARexx port · Drag & Drop colours · External filter modules · Extensive documentation · 60 textures, 50 landscapes, 30 other pictures and many fonts included. £49.95



Mods Anthology

Do you like Music? Do you like Computers? Do you like Computer-Music? Then, this collection is what you need! 4 CD-Roms full of Music-Modules! More than 18000 mods of any format (MOD, S3M, XM, IT, Amiga Synthetics...) all sorted by Composers in priority, by Groups, then by Kinds, all stored in uncompressed form readable under all the major platforms. Coming along with 11MB of Module Lists (ASCII, AmigaGuide...) and 25MB of Module Players and Trackers for many computers.Released with the full agreement from more than 200 musicians (PC and Amiga Scene) who provided me with a personal infofile and picture, as well as many previously unreleased modules!Enjoy this 7-years manic work! Prepare to listen to 1000+ hours of Music! £29.95



NetNews Offline Vol. 1

NetNews Offline Vol. 1 is the first disk of a new bimonthly published series of Amiga CD-ROMs which contains all Amiga-related newsgroups from the internet. Every volume features about 50.000 articles which contain hot rumours, important information about all aspects of the Amiga, press-releases, discussions and flame wars, ... A newsreader is included. NetNews Offline is the cheap alternative of getting in touch with Usenet. £14.95

All products are available in your local Amiga-shop or through national mail-order-companies

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Risky Business

Silltunna Software sprang from nowhere with their first game XTreme Racing. **Jason Jordache** chats to the Warwickshire based team of enthusiasts who are aiming to make it big in the games industry.

I caught up with Richard, artist at Silltunna, on the Silltunna Support BBS, which I first came across by chance a year or so back when the team were working on a couple of projects like a Doom clone called Dentaku 26, and aspiring to release their first game. Well, they made it, and first off the mark was XTreme Racing, released through Black Legend in January '96 to a hungry games market, on the whole being well received by the Amiga press.

Silltunna was set up as a limited company in November 1994. We were however working on it before that, since about June 1994. Our first game was Dentaku 26, we worked on that while Alex completed his University course. After Alex left Uni (July 1995) we decided that there were way too many Doom clones coming out on the Amiga, so we shelved it in favour of a karting style game – which became XTreme Racing. Silltunna is a full time occupation for all of us (me, Alex and Mark), financially and it keeps us ticking over.

JJ: How did XTreme evolve?
XTreme Racing started out, as I said, as a karting game – until we saw Virtual Karting! At this point we decided a more standard wacky car theme would be better, and looking back, I definitely think it was. The 3D engine was originally chunky copper screen, which we changed to proper c2p routines and blitter modes. The whole project only took around four months, from conception to completion, and we were pretty chuffed with the end result.

However, when we released it there were complaints about certain gameplay problems, so, being the conscientious bunch that we are, we decided to rectify them.

For all our XTreme racing GFX, we have our custom, in-house object cutter coded by Mark (which appears on the data-disks). The tiles are laid on screens in rows, and the code automatically generates chunky versions for use in the game, they are simply placed using the editor (also on the data-disks).

Talking about restrictions in creating the games; not too many, generally mainly size for different things (ie XTreme race tiles 64x64 pixels, Boulderdash 3D textures 128x128 in size, etc.). Colours – so far everything is 256 colours, with one or two limits on the palette (ie XTreme – first 16 colours reserved, last 16 reserved for colour cycling).



Gothic City from the XTreme Racing data disk. How the graphics are stretched to fit into the layout of the game

JJ: And for those who try and fail to view the graphics on the XTreme game disk?
We use Crunch Mania – not to disguise GFX, simply to crunch them – the GFX start out as ILBM, are then converted to chunky for the game GFX, raw for the front-end GFX, and then crunched. The object cutter converts all GFX (except tiles) to chunky. Tiles, as I said, are automatically converted by the code.

JJ: With you living in Warks, Alex in Sheffield, Mark in London and Andy in Staffs, do you use modems to keep in touch? How often do you guys get together personally to work on a project?
We keep in touch via e-mail and the BBS for most

➤





We've got a couple of dodgy looking JPEGs they said. Cheers guys. Alex and Richard, part of the Silltunna team. Alex is the yellow one

It's the patch

The problems Richard mentions as regards XTreme are rectified in a free patch now available. Along with improved playability and removal of miscellaneous bugs, here's some of what's on offer.

- 4 player joystick adapter support
- All cars now handle differently to each other Modified
- Deathmatch rules
- Weapon explosions now more spectacular
- All new weapons
- 5 seconds invulnerability when you are put back on the track after you are killed
- Option to auto-save best lap times & screen settings
- E Z handling – Option for slightly easier control, especially for beginners
- Utility to merge and view best-laptimes



Sprites from the sleeping Dentaku doom clone. If it's as fast as they claim, thousands of Amiga gamers would wish this game finished and available



More artwork from the game

➤ things, and voice calls a few times a week. It varies the amount of time we get together – it's less now since Alex moved to Sheffield – currently I'd say once/twice a month tops.

JJ: What games do you have planned for the future?
We have quite a few projects underway, but I can't say too much about them at this stage – they are multi-format, some will be appearing on the Amiga, others may not. One that I will ela rate on is Boulderdash 3D (the title WILL changed!). With Amiga, PC and Playstation sions under development this is 3D platform g ing – a Doom style engine, with platform gameplay.

There will be a lot of strategy and tac involved, and tremendous multi-player scop up to eight players. There will be several diffe level types, such as Hell, Caverns, Hi-tech, Ali Urban and Shopping mall. There will also be so impressive graphical features too, such as 3D ture mapped environment, look up/do crouch/jump; various shading effects, inclu depth shading and mist effects; animated textures and outside areas.

JJ: It can be difficult giving a release date fo project still in development like Boulderdash, how about a vague release date?
Lets say `released by Christmas '96.

JJ: Talking about Boulderdash, does this bear relation to Dentaku?
None (code wise), it does however contain a few textures that I had drawn for Dentaku about 50% of them in one form or another. A one or two Dentaku enemies may appear there too.

JJ: I had word from people impressed Dentaku's fast 3D engine. How does it compa to the current Doom clones available on th Amiga and are there plans to finish it off?
It still remains by far the fastest engine aroun and there were some good little graphic effects coded that haven't been seen in oth clones. There are no plans to complete Dento – but the code and graphics still live on (rippe out and stuck into other projects).

Richard says a "very early demo" of Boulderda 3D is available . Those of you with the hardwa can download that along with other freebies li the XTreme Racing patch, from the Silltunn Support BBS (opening times 10pm-7am) on 017 842105.

Meet the team

Silltunna currently consists seven people, four of them full time members. They are on the look out for other programmers and artists to join the ranks.

Richard Whittall, age 22
Graphics and game design
rich@xtreme.demon.co.uk
Usual school malarkey, 2 years A-Levels, followed by a BTEC in design. I got offered a Uni place at Wolverhampton, but declined due to their poor quality football. Decided I didn't want to do anything like graphic design on paper, and had a dabble on the computer instead. Sent a picture to a magazine, which was published – and this is how I met Alex, he saw the picture, phoned me and we've been together since then (Aaah!)

"When not working I spend most of my time with my gorgeous girlfriend – down t'pub. I've also been known to listen to large amounts of blues and rock music, watch early '80s Italian gore flicks and anything on the cartoon channel and, err do lots of shopping.

Alex Amsel, age 21
Lead programmer
alex@teeth.demon.co.uk
Boffin! Has just graduated from Exeter University with a degree in Cognitive Science, that's AI and psychology. However, there is a darker side to him, he's a football lout – supports Wolves and gets hammered on Banks bitter or vodka after matches.

"I spend most of my time watching Wolves FC, an English football club – I have also helped organise supporters clubs and so on. If not doing that, you will find me listening to indie or industrial music, or watching Monty Python films."

Mark Fitt
Additional coding
Excellent coder – it was a choice between music and coding, and coding won (for now). Tends to work the weirdest hours – night shifts only – must be the London air. Can't handle his beer despite what he might say to the contrary. Mark likes to dabble with Jungle – in fact, he's a total jungle freak these days. He's had a couple of pro jungle tracks released too, and there's another in the pipeline for him.

Andrew Cashmore
Graphics
"Our new little fledgling! He's a bit of a graphical wiz – he's currently heavily into the 3D rendering side. He's been working with us for about the last 2-3 months and used to be a games coder."

Simon Speight
Music for XTreme Racing

Tony Farrel
Additional music for XTreme Racing

Ted Bailey
Testing and ideas



Dead bodies. Sheep, Lemmings and grown men. A blown to bits. A selection of sprites plucked fro the XTreme archives

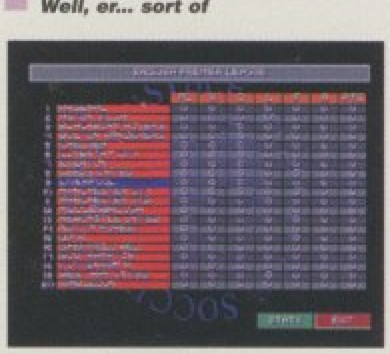
By Andy Maddock

Sensible World of Soccer

Andy Maddock tries his hand at a bit of football management, and doesn't do a bad job



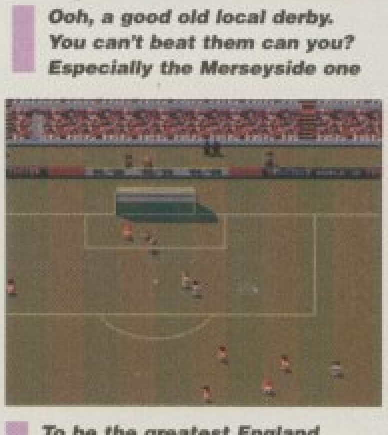
As you can see, the Man U squad is formed entirely of brothers. Well, er... sort of



This is the Premiership before the season begins. Interesting isn't it?



Ooh, a good old local derby. You can't beat them can you? Especially the Merseyside one



To be the greatest England manager ever, you have to be better than me... Hah

Terry Venables failed. You won't

If you want to be the next England manager, remember to set your nationality to English because you will have more chance of getting the job. However, do remember that other international jobs can be offered to you.

To get the elusive job you must impress the chairman almost every season. You must at least finish in the top 10 every year, and if you fail to manage that then winning a cup will be sufficient enough to impress the president of your country. If you can achieve the right blend of these wins then an international job will be offered to you.

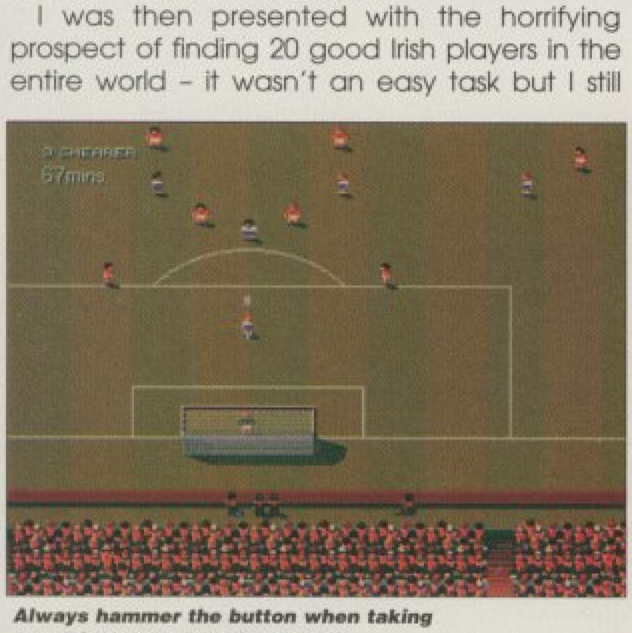
For instance, I started my career with Liverpool. I never won the league title and I only ever won the league cup once in about 10 years! It doesn't sound like a good record, but I finished in the top 10 every season and the team was a finalist in several competitions, including those in Europe.

The Republic of Ireland job was eventually offered to me and I took it. Obviously I wanted to manage England and I could have waited, but no, I was too excited and pressed 'Accept' as soon as possible.

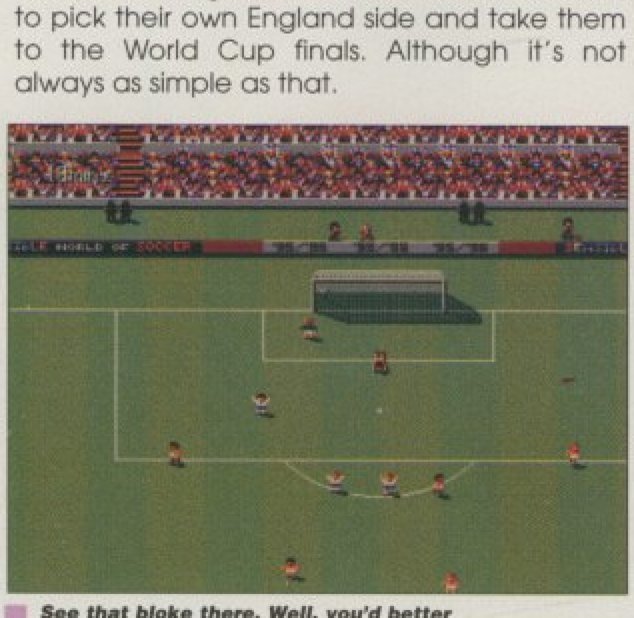
I was then presented with the horrifying prospect of finding 20 good Irish players in the entire world – it wasn't an easy task but I still managed to win the European Championships. This and the World Cup are the major competitions, but as there is a four-year wait between them, I had to play a lot of absolutely pointless friendlies. At the end of the year you will be presented with a nice tour somewhere where the opposition is about as good as Doncaster, thus allowing you to pick up a small, rusty trophy. That always impresses the president.

When I managed to qualify for the World Cup, the 'President' of England was impressed enough to hand me the job. Blimey, it felt like real life.

I was faced with the prospect of doing what every other England fan dreams of, and that's to pick their own England side and take them to the World Cup finals. Although it's not always as simple as that.



Always hammer the button when taking penalties; no pansy side-footing



See that bloke there. Well, you'd better wake him up otherwise he's out of the game

Take note Glenn Hoddle!

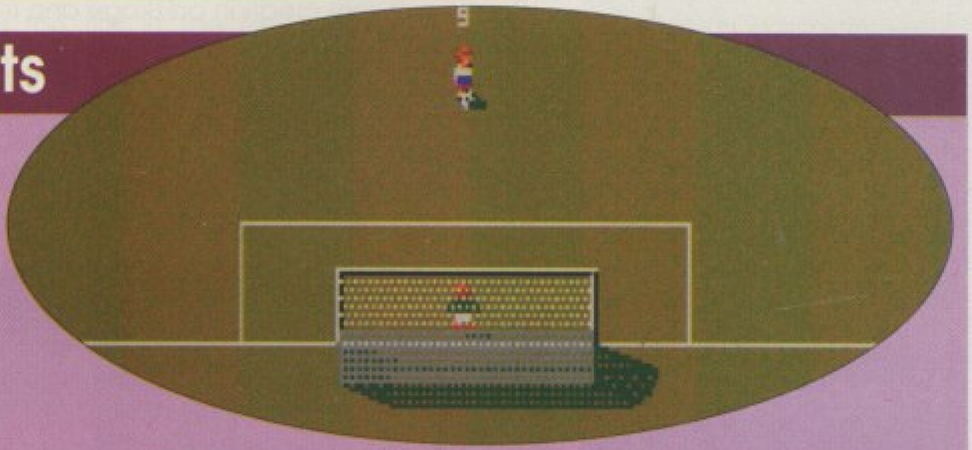
Your first job is to pick 19 players who you will take everywhere. But remember, these can be changed at any time, so you don't have to stick with them.

Your first idea will probably be to fill the team up with English players who play for the club side you support in real life. Whether it's Blackburn or Bury, that striker will be the first choice for your side, but don't do that! Pick the best 11 from the entire world, not from your own side!

Player	Position	Club	Selection reason
1: Tim Flowers	Goalkeeper	Blackburn	Valued 1.8m
2: Rob Jones	Right Back	Liverpool	Speed
3: Stuart Pearce	Left Back	Notts Forest	Tackling
4: Paul Ince	Midfielder	Inter Milan	Tackling, passing
5: Tony Adams	Defender	Arsenal	Heading and tackling
6: Gary Pallister	Defender	Man Utd	Heading, tackling, speed
7: David Platt	Midfielder	Arsenal	Passing
8: Paul Gascoigne	Midfielder	Rangers	Passing, speed
9: Alan Shearer	Striker	Blackburn	Shooting, speed
10: Les Ferdinand	Striker	Newcastle Utd	Speed, finishing
11: Steve McManaman	Right wing	Liverpool	Speed
12: Graeme Le Saux	Left back	Blackburn	Tackling
13: David Seaman	Goalkeeper	Arsenal	Second most expensive Gk
14: Robbie Fowler	Striker	Liverpool	Finishing, speed
15: Stan Collymore	Striker	Liverpool	Shooting, speed
16: Gareth Southgate	Defender	Aston Villa	Penalties (Hah)
17: Steve Stone	Midfielder	Notts Forest	Speed, passing
18: Teddy Sheringham	Striker	Spurs	Heading, finishing
19: Darren Anderton	Right wing	Spurs	Speed, passing

● Remember, when a player gets injured for more than a week, drop him completely from the selected 20 and replace him with someone fit to gain more ticks.

My career achievements



1995/6 – Liverpool
Premier: Runner up
Cup: Semi final
League Cup: Semi final
EUFA Cup: Quarter final

1996/7 – Liverpool
Premier: 3rd
Cup: Finalist
League Cup: Round 4
EUFA Cup: Semi Final

1997/8 – Liverpool
Premier: Runner up
Cup: Round 3
League Cup: Round 4
EUFA Cup: Semi Final

1998/9 – Liverpool
Premier: 5th
Cup: Round 5
League Cup: Winners
EUFA Cup: Quarter Final

1999/0 – Liverpool
Premier: 6th
Cup: Semi final
League Cup: Round 3
EUFA Cup: Round 1

2000/1 – Liverpool
Premier: Runner up
Cup: Semi Final
League Cup: Round 3
Resigned

2001/2 – Republic of Ireland
Group Position: 4th
World Cup: Not qualified
Friendlies: Won 3:
Drawn 1: Lost 1

2002/3 – Republic of Ireland
World Cup: -
Euro Tour: Won 2: Drawn 1: Lost 0
Friendlies: Won 3: Drawn 1: Lost 1

2003/4 – Republic of Ireland
Euro Position: 1 – Qualified
Friendlies: Won 1: Drawn 3:
Lost 1

2004/5 – Republic of Ireland
Euro Champ: - Winners
Friendlies: Won 2: Drawn 2:
Lost 1

2005/6 – Republic of Ireland
World Cup: Qualified
Friendlies: Won 1: Drawn 2:
Lost 2

2006/7 – Republic of Ireland
World Cup: Round 2
Friendlies: Won 3: Drawn 0:
Lost 2

2007/8 – England
Euro Position: 1 – Qualified
Friendlies: Won 0: Drawn 3:
Lost 3

2008/9 – England
World Cup: Won
Friendlies: Won 3: Drawn 2:
Lost 0

Reviewed by
Andy Maddock

Beyond Reality

If you read the news article in System News around two months ago you would've caught wind of a brand new software construction kit entitled Reality. Well already the developers have knocked up some games to prove what it can do. You may have seen a couple of games featured on the front of coverdisks across various magazines as BPM Promotions are insistent their name and products should pop up everywhere.

Each game isn't really outstanding in quality and is certainly not going to set the world on fire although if you take a small feature from each and maybe put them together mentally you may be able produce a picture of a game of a much higher quality than these and possibly even to the standard of a full price commercial game.

Obviously each of these offerings should be looked upon as demonstration programs as the real full-price games by BPM will be along shortly just as soon as they are finished. The titles are going by the names of Robin Hood and Spacefighter and we are assured there are others the pipeline.

All these games were created using the Reality software creation package and for a relatively small donation, you too can sample the delights of programming without attending a two-year computer course learning C+ or another programming language which frequently seems to prevent new users from putting their own thoughts and ideas into practice.

Joker Poker



A quick way to make loads of cash and get instant popularity. Poker... the name of the game

This is probably one of the most intriguing of the titles as it sounds like it has connotations of gambling which suits me down to the ground. Basically all you have to do is play poker. I'm not saying anything else because all I can do is explain the rules of the game and I'm certainly not doing that.

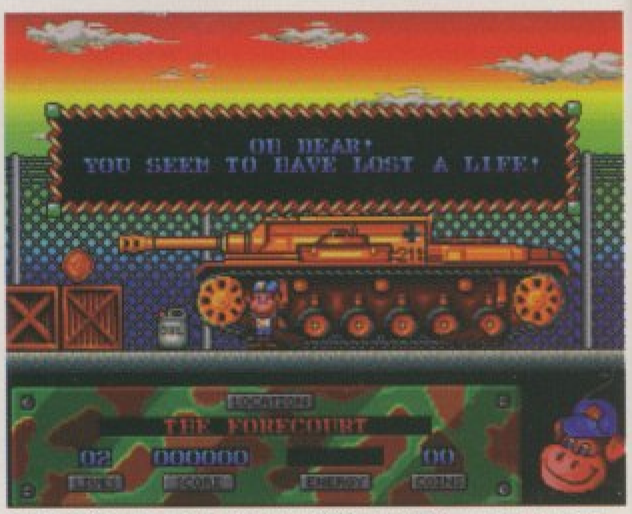
Joker Poker is a fine example of what Reality can create because of the sheer variety it can produce. Whether it's shoot 'em ups, platform games or card games, Reality can do 'em all.

Charlie Chimp - The Great Escape

Chimp boy Charlie returns to grace the Amiga screens once again. And unfortunately it suffers from the same problems as the rest. Having said that, the graphics do look a little better, and that's probably the result of time being spent on the game as a whole.

As you play Charlie Chimp you do begin to notice aspects which would be good in other games and it shows the quality of software Reality has the ability to produce.

Once again, if a serious Amiga user who saw something in the game would take the time to improve graphical/gameplay glitches then a commercial product would be a certainty. As a standalone version it just doesn't offer enough to give Amiga users any value for money.



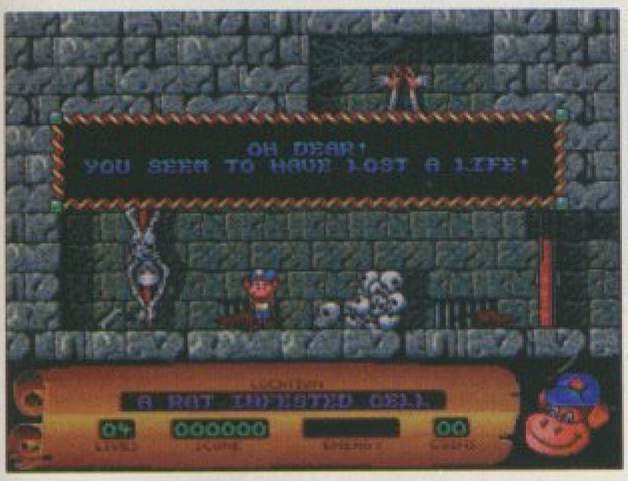
Here's the monkeyboy himself Charlie Chimp. He is without doubt the king of all monkeys -

Free Demos

If you want a FREE demo of Reality then write to or phone BPM Promotions and ask them. They're a nice bunch and they'll be willing to help answer any enquiries. You can reach them at:

BPM Promotions
8, Magnolia Park Dunmurry
Belfast BT17 ODS
Or you can call them on 01232 626694

Treasure of Tutankahmun



Oh look, it's the monkeyboy himself Charlie Chimp. He is without doubt the king of all monkeys, again

Charlie Chimp stars in yet another adventure. This time he's after the treasure of Tutankahmun.

The series has obviously been the most popular with Amiga users as there have been new releases now and again. In my opinion Charlie Chimp is right on the edge of becoming a standalone full commercial release. If more time went into the planning and presentation it could easily be boxed and put out on the shelves on the pretty much redundant Amiga games market.

This release is actually better than the others because the graphics seem a tad better and the gameplay seems slightly more involved. This is a relatively decent game contained in the packs which boosts the value for money.

Underwater Capers



I'm sure everybody will agree that the small sprite looks very familiar indeed

This is the second release in the "capers" series, only this time you take control of a "Pinkie" lookalike named Seemore Doolittle and your job is to rescue your fantastic bird Marion the Mermaid while battling your way through hordes of underwater aliens, collecting as many power-ups as humanly possible.

The Seemore Doolittle sprite looks like Millenium's Pinkie and the collision detection is a bit dodgy, although apart from that it's a nice little blast 'em up game which with a little more though and planning could easily be thought of a commercial release, especially in today's Amiga games market.

Wrath of Gwendor

You are Theos the Warrior and your job is to rescue your brother from the evil clutches of the knight Gwendor. There are eight levels to battle through, each one requiring much skill to negotiate the nasty snakes among other energy-sapping things.

Not only is Wrath of Gwendor a none stop action game, it also contains a puzzle aspect whereby the idea is to switch switches and use magic potions.

It's unfortunate that the game doesn't really boast quality. The idea is good although it's not put it into practice. I suppose if more time was taken graphically, it could present a challenge and maybe even enter the world of PD. As it stands it needs more work.



Oh dear, the animation is possibly the poorest aspect along with the terrible gameplay

Toyland Capers

This is the first in the series of the "capers" adventures starring Seemore Doolittle in his little spaceship type thing in which the idea is to blow every toy out of the sky like a mad child.

Toyland Capers is pretty similar to Underwater Capers, although this time you're bombing about places like Lego land. Top stuff.



Here's "Pinkieboy" trippin' around the world of toys. Marvellous innit?

What's it all about?

All these games are contained in a special Reality games pack priced at just £12.50 for the lot including another Charlie Chimp adventure or two.

As most people know, the production and development of a computer game can take at least 6 to 12 months, and as these games are produced by the designers of Reality, the whole pack should've taken at least four years to put together. And did it? I very much doubt it, as they also had to put together the actual game construction kit beforehand.

Although, when you, the punters, get hold of this you'll be able to spend much more time and create some top quality stuff. Reality could be the way forward for all budding gamesplayers. It will certainly present non-programmers a chance to pursue their own ideas.

We should have a review of the full package next month, so keep your eyes peeled if you want to enter the world of programming.

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Dataflyer SCSI A500 149.00
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Neil Mohr looks at how to make memory-saving measures more convenient

Memory matters

Last month we looked at the basics behind getting programs to run with as little of the system software loaded as possible, thus leaving the maximum amount of memory at your disposal. The problem is that it is a little laborious if you have to mess around like this each time you need to run a program. So, this month we'll look at a couple of ways in which the memory-saving process can be made easier.

Both methods involve AmigaDOS scripts and different ways of circumventing the original startup-sequence, which is where most of the system software that we want to avoid originates. The neatest solution involves one small program called MBPress and a few lines added to the startup-sequence, so get your favourite text editor ready.

Using the program MBPress at the very start of your startup-sequence, it is possible to detect what combination of mouse buttons you are holding down. MBPress is very flexible and will even take account of three-button mice, but for us, holding the right mouse button down will be enough. So, at the very start of your startup-sequence, you should add these lines:

```
C:MBPress
Set ANSWER $RC
If $ANSWER EQ 2
Skip Quick
EndIf
```

This section of AmigaDOS code will check, using MBPress, to see if the right mouse button is being held down. If it is, the normal startup-sequence will be skipped and our new startup will be used in its place. If now at the end of the startup-sequence you add the following lines, we will be almost finished.

```
Lab Quick
C:Setpatch QUIET

Assign >NIL: T: RAM:
Assign >NIL: CLIPS: RAM:
Assign >NIL: REXX: S:
Assign >NIL: PRINTERS: DEVS:Printers
Assign >NIL: KEYMAPS: DEVS:Keymaps
Assign >NIL: LOCALE: SYS:Locale
Assign >NIL: LIBS: SYS:Classes ADD
Assign >NIL: HELP: LOCALE:Help DEFER

C:Copy ENVARC:#?.info RAM: QUIET

C:Rename SYS:WBStartup SYS:WBStartup0
C:LoadWb
Wait 3
C:Rename SYS:WBStartup0 SYS:WBStartup

EndCli >Nil:
```

Save, then boot your machine and hold down the right mouse button. AmigaDOS will skip the normal startup-sequence until it reaches the *Quick* label. It will then execute the new startup, which sets all the standard assigns and loads Workbench without executing any of the WBStartup programs. You may want to change the T and CLIPS assigns to a place on your hard drive again to save memory, and the copy command is just there for people who have a RAM icon stored in ENVARC.

Additionally, you may want to add some of the following extra commands before the first rename command, depending on your needs.

```
DEVS:Monitors/NTSC
DEVS:Monitors/PAL
C:AddDataTypes REFRESH QUIET
Run >NIL:  Execute S:User-Startup
```

The two monitor commands set the proper PAL and NTSC screen drivers. The AddDatatype command will initiate all your Datatypes if you need them, and the last one runs the user-startup. Normally you can do this without losing much memory, as it is mainly only assigns that are stored in it.

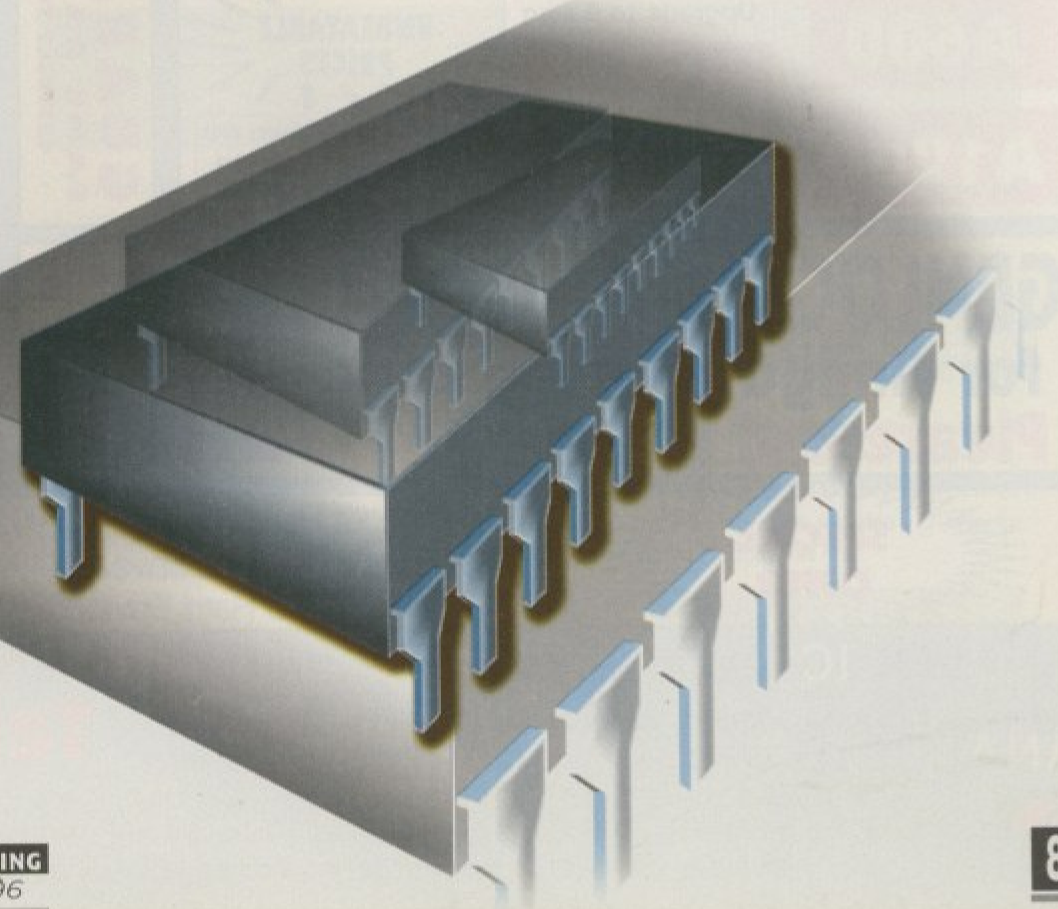
The other method of making memory-saving easier is not quiet so neat, but is equally usable. It involves making an AmigaDOS script specifically for each program you want to run with the maximum memory available. As an example, this is the start script I use for Image Engineer.

```
assign env: envarc:
assign t: files:xtra/stuff
C:SetPatch QUIET
cd files:utils/imagepro/ie
assign ie: ""
stack 33000
run ie
```

Before you could use this script you would have to change lines two and four to suit your own needs. Line two sets up the temporary directory that AmigaDOS uses now and again to store things. You could just assign this to RAM, but as we are trying to save as much RAM as possible, the hard drive would be better.

The fourth line changes the current directory to the one containing Image Engineer. Again you will have to change this to wherever you installed Image Engineer. The next assign simply assigns the volume IE to the current directory.

Now type this into your text editor and save it off to your C directory as **StartIE**. You then need to type the following in a Shell **protect c:startie +s**. This adds the script protection bit to the StartIE file, telling AmigaDOS that StartIE is a script file not an executable program. Using this, if you reboot your machine holding down both the mouse buttons and select boot with no startup-sequence and then type StartIE, the AmigaDOS script will execute, and Image Engineer will run with as much memory available to it as is possible.



Eliminating global variables when creating memory-resident code, with Paul Overaa

assembler

Resident code

The theme this month revolves around the Amiga's resident command facility and what you have to do code-wise to make use of it. Resident programs, as most of you will know, are loaded into memory just once (usually via the AmigaDOS Resident command), and from that point on, the code stays there and is, therefore, instantly available for use without having to be re-loaded. The other benefit is that the scheme is extremely memory-efficient – no matter how many processes uses the command, only one copy of the code is ever really available in memory at any one time (and this is true even if different processes use the command at the same time).

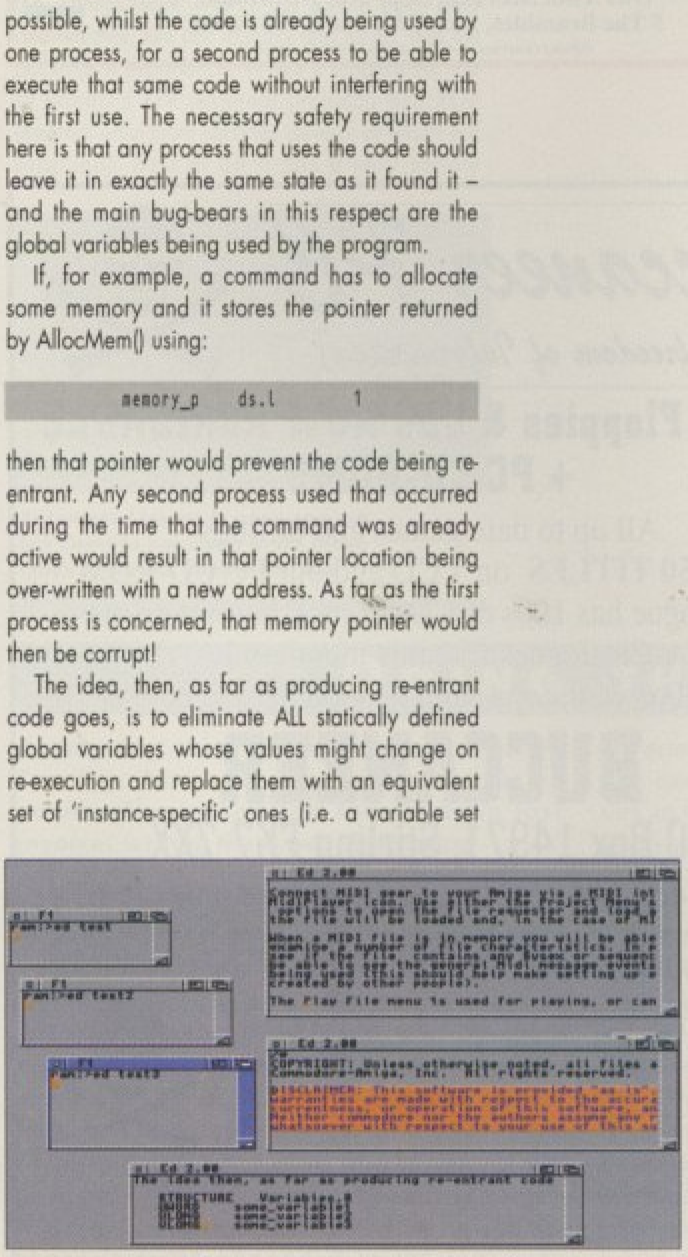
For code to be made resident in this way it has to be pure, i.e. both re-executable and re-entrant. What this latter term means is that it should be possible, whilst the code is already being used by one process, for a second process to be able to execute that same code without interfering with the first use. The necessary safety requirement here is that any process that uses the code should leave it in exactly the same state as it found it – and the main bug-bears in this respect are the global variables being used by the program.

If, for example, a command has to allocate some memory and it stores the pointer returned by AllocMem() using:

```
memory_p    ds.l        1
```

then that pointer would prevent the code being re-entrant. Any second process used that occurred during the time that the command was already active would result in that pointer location being over-written with a new address. As far as the first process is concerned, that memory pointer would then be corrupt!

The idea, then, as far as producing re-entrant code goes, is to eliminate ALL statically defined global variables whose values might change on re-execution and replace them with an equivalent set of 'instance-specific' ones (i.e. a variable set



The key to creating resident code likes in the elimination of conventional global variables

```
STRUCTURE   Variables,0
UWORD       some_variable1
ULONG       some_variable2
ULONG       some_variable3
LABEL       Variables_SIZEOF

_main       link        a5,#-Variables_SIZEOF   space for variables
            movem.l     a2-a6,-(a7) preserve registers
            lea         -Variables_SIZEOF(a5),a5          modify frame pointer

* This is where the 'guts' of your routine would go.
* Needless to say you would adjust the structure definition
* to suit the variable types you were interested in storing!

            movem.l     (a7)+,a2-a6 restore registers
            unlk        a5
            rts
```

Listing 1: Typical framework for creating instance-specific globals

that is created each time the program is run). One handy trick for doing this is to set up a structure that represents the variables needed by your program, and then allocate the appropriate variable space on the stack using the 680x0 Link instruction that we looked at last month.

Now, the whole point of using the structure macros available in the system headers is that it should be possible to use indirect addressing with the offsets that have been produced as displacements to access individual variables. But there is a snag connected with using the 680x0's Link/Unlk frame pointer mechanism when dealing with Amiga-style structure access. Suppose, for example, we define the following structure to hold the local data for a program:

```
STRUCTURE Variables,0
UWORD     some_variable1
          ULONG       some_variable2
          ULONG       some_variable3
          LABEL       Variables_SIZEOF
```

This definition produces structure offsets of 0, +2, and +6 respectively, but if you try to use these sorts of structure definitions to access variables stored on the stack via the Link instruction's frame pointer register, you'll find it all goes wrong! You might think, at this point, that the solution is to use the offset values in their negative form, but if you play around with the offset values generated by these structure definitions you'll find that this doesn't help either.

Why? Because the structure offsets are designed to work in conjunction with a low memory base address, and this, of course, tells us exactly what we need to do to get things in order – we alter the register being used as the frame pointer so that it points to the bottom, rather than the top, of the memory area that has been set aside. If, for example, we wanted to create the variables defined by the structure described earlier we'd adjust the frame pointer like this:

```
link      a5,#-Variables_SIZEOF   space for
variables
lea       -Variables_SIZEOF(a5),a5
modify frame pointer
```

Remember, incidentally, that this type of frame pointer modification needs to be undone before the program or routine terminates – the 680x0 Unlk instruction will expect the frame pointer register to be unchanged (i.e. still pointing to the top of the stack frame). The easiest way of ensuring this is to copy the original contents of the frame pointer register at the same time that you preserve any of the other registers that are going to be used. You might for example start your routine like this:

```
link      a5,#-Variables_SIZEOF   space for
variables
movem.l   a2-a6,-(a7) preserve registers
lea       -Variables_SIZEOF(a5),a5
modify frame pointer
```

This type of entry point code then allows the normal movem type of routine termination to reset the frame pointer to its original value;

```
movem.l   (a7)+,a2-a6
unlk      a5
rts
```

If we put all these ideas together we end up with the framework shown in listing 1, and within this you'd simply use indirect addressing to access the variables. Initialising some_variable1 to zero for instance would be done like this;

```
move.w #0,some_variable1(a5)
```

Next month, incidentally, I'll be giving you a runnable example that shows how all these ideas fit into place and explaining how you physically tell AmigaDOS that the code you've written is to be regarded as 'pure'!

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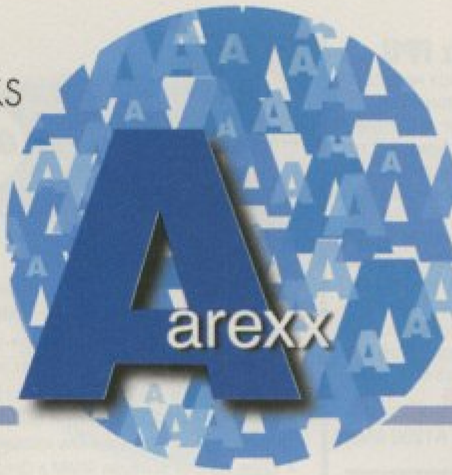
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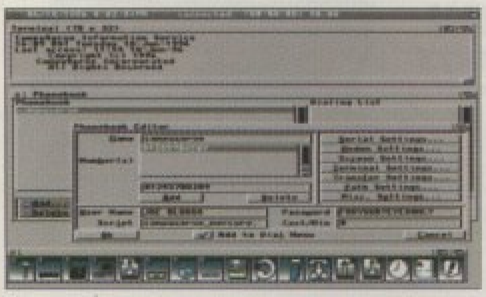
Paul Overaa looks at ARexx's role as the 'unsung hero'



Auto comms

With the nigh-on exponential growth of comms-related activities on the Amiga, it dawned on me the other day that ARexx, despite having an important part to play in this technological revolution, barely gets a mention most of the time. I thought then, to set the record straight, that it would be a good idea to look at a couple of packages that have particularly useful ARexx connections, beginning this month with Termite, the telecommunications program from Oregon Research.

Termite will work with any Hayes-compatible modem from 300 baud to the latest 28.8k bps offerings, and the basic facilities offered by Termite give pretty much all you need for everyday comms work. You've got all the usual bells and whistles, like call logging and so on, and the package is expandable in that it supports the use of standard XPR (external protocol) and XEM (external emulation) libraries (several of which are supplied). Best of all it has a very solidly



Automated log-on is easy enough, but Termite can even write these types of ARexx scripts for you!

```
/* compuserve_mercury.rexx */
address 'TERMITE.1'
Wait 'WELCOME TO MNDS:'
Send 'nhost.seraccess-.ukcns\r'
Wait 'Host Name:'
Send 'CIS\r'
Wait 'User ID:'
Send '\u\r'
Wait 'Password:'
Send '\p\r'
```

Listing 1: A typical Mercury 5000 node Compuserve log on script

programmed ARexx interface, and this is where much of the interest from serious users lies. Perhaps, initially, the most useful interface commands are a WAIT command which allows you to wait for particular text strings and a SEND command that lets you send text strings to whatever system you are connected to.

The WAIT command, incidentally, has two escape mechanisms: Firstly, whilst the script is being executed, the user can press any key on the keyboard to abort the current wait. Secondly, there is a timeout setting available which ARexx scripts can modify using a TIMEOUT <seconds> command. One good thing about Termite's SEND command is that it allows you to specify a number of control codes which, on transmission, are converted to the appropriate characters. '\u' and '\p' for example signify a user name and password.

The easiest way to see the usefulness of these commands is to take an example: Let's say you have decided to get yourself a Compuserve account and, having hunted through the hundreds of UK connection numbers now available, have found that your nearest (local call) connection is a Mercury 5000 Network number. Logging onto Compuserve via Mercury is a little different to the standard connection protocol. Having dialled the number you first get a connect/sign-on message which looks something like this:

```
CONNECT XXXX
01 WELCOME TO MDNS: 1 10 099 211 01
```

and at this point you have to type 'nhost.seraccess-.ukcns', after which your connection is confirmed. You're then prompted for a host name and, by typing CIS, become linked into Compuserve where you provide a user identity and a password in the usual fashion.

Bottom line

PRODUCT DETAILS

Product	Termite (Oregon Research)
Supplier	HiSoft
Price	£39.95
Tel	01525 718181

SCORES

Ease of use	85%
Implementation	90%
Value For Money	95%
Overall	90%

DOING THINGS THE EASY WAY

Automating this logging-on procedure via Termite's ARexx facilities couldn't really be easier. The initial link for example just involves writing these two statements:

```
Wait 'WELCOME TO MDNS:'
Send 'nhost.seraccess-.ukcns\r'
```

Notice the \r placed at the end of the text string being sent. This is another of Termite's control sequences and in this case it has the same effect as if you had pressed the Return key on your keyboard. Waiting for, and responding to, the user id and password prompts is just as easy, as you'll see from the script shown in listing 1. The \u and \p characters are expanded to the real user identity and password values that are stored in Termite's phone book (and needless to say you can have different ID and password values associated with each telephone number you store).

And that's pretty much all there is to it as far as Termite-based bulletin board or gateway services connection is concerned. You find out what prompts/responses the system uses and then write a script that waits for each prompt and sends back suitable replies. It's easy enough to write the scripts manually but Termite has another trick up its sleeve – because it can create these types of scripts automatically using a script recorder. This monitors your actions as you log-on and converts them into the appropriate ARexx script which can then used to automate subsequent connections.

Of course, you can do much more with Termite's ARexx facilities than simply log-on. You can select protocols for uploading and downloading files (or batches of files), and there is a CAPTURE command which allows you to send incoming serial data to a disk file. Since this capture can be turned on and off under ARexx script control, it allows you to write to disk as much, or as little, of the terminal interaction as you wish. You could, for example, create a script that connects you to a gateway service, checks (and if necessary downloads) your e-mail, and then logs you off and hangs up as quickly as possible, leaving you to read your mail off-line. Termite does the dialing, your script handles all the service interaction, and all you basically have to do is sit there and watch!

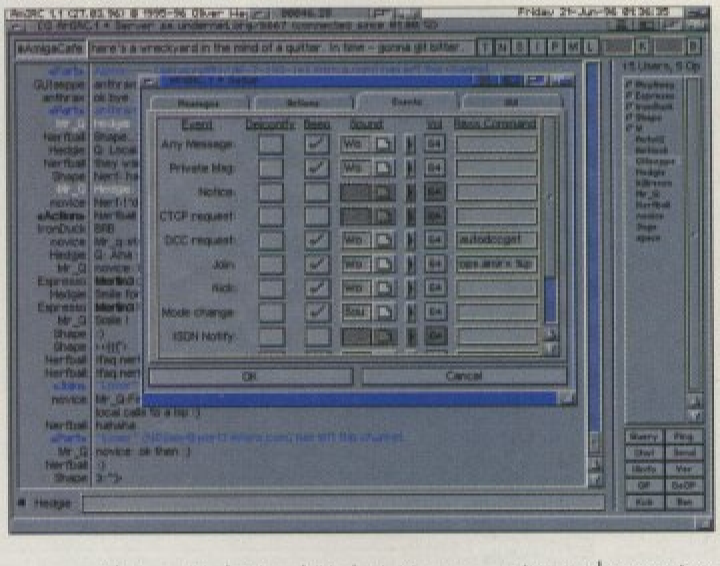
Power Chatting

Dave Cusick beefs up the world-beating AmIRC

If you read about #Amigacafe a couple of issues ago and rushed onto Internet Relay Chat with AmIRC as a consequence, or if you've only just discovered the wonders of this superb IRC client, then this column is for you. Without a doubt, AmIRC is the most powerful and configurable program of its type I've ever seen on any machine, but in order to harness its full potential you may want to make a few adjustments and improvements here and there.

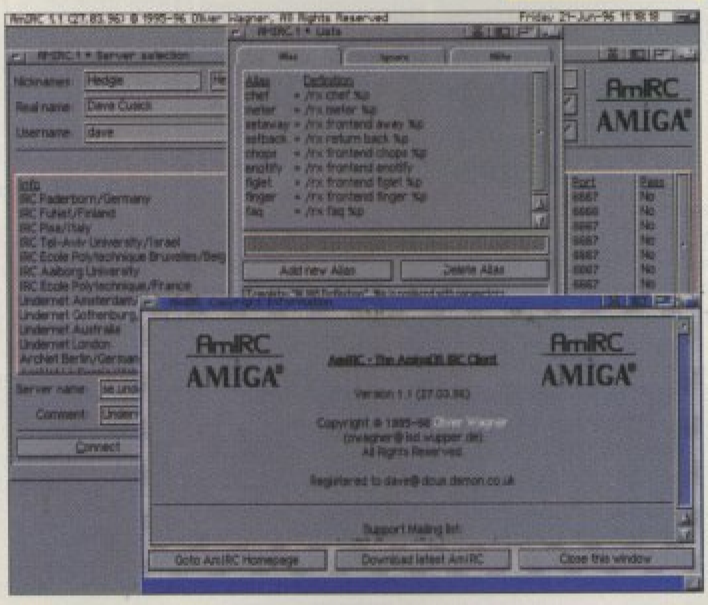
First of all, let's take a look at the simpler ways of making your life easier. When you're selecting your Nicknames, it generally makes sense to keep them as similar as possible so people will know who you are. My nickname on IRC is Hedgie, so as my reserve nicks I use _Hedgie and Hedgie_, so that even if some heartless soul swipes my nick, friends will be able to recognise me.

Another advantage of using such similar nicknames is that you can easily configure AmIRC to alert you whenever somebody uses your name. Take a peek at the Lists window (which is accessed from the Settings menu) under Hilite. Click on the button to Add A New Hilite Pattern, then enter your nick in inverted commas. Also, add likely variants on your nick. I use 'Hedgie' and 'Hedge'. Now go to the Setup screen (also from the Settings menu) and on the GUI page, change the colour of highlighted text to something that contrasts with ordinary text.



With a little bit of tweaking AmIRC can make your life a whole lot more pleasant

You might also like to add a sound effect using the Events page. This way you can happily be browsing away in the background and whenever someone addresses you, you will be alerted by a sampled sound and your attention will quickly be drawn to the highlighted message on screen. Whilst you are on the Events page, it would also make sense to add a sound effect and highlighted text for Private Messages, or a sample when someone new joins the channel so you can keep a look out for friends.



Don't forget to register your copy of AmIRC soon...

Time saver

Make use of the Function Keys page to store lengthy but frequently used messages, such as the location of your home page or the Amiga system configuration you are using. This can save a lot of typing. There are also some labour-saving devices built into the program which are worth making use of, such as the URL Grabber (added in version 1.1), which sends any Web sites people mention to your browser to save you the effort of entering the URL manually.

Finally, as mentioned in issue 100 of *Amiga Computing*, one of the best features of AmIRC is its support for ARexx scripts. There are some scripts you absolutely should not be without, and you'll be able to get hold of them either on Aminet or by asking nicely on certain channels. They are all straightforward to install, a process which is generally explained in accompanying documentation.

If you use YAM for e-mail then get hold of Oliver Campion's YamIRC script which allows you to e-mail people from within AmIRC simply by typing: "/mail Hedgie blah...". Another handy script from the same bloke is FAQ, which allows those of us who aren't privileged enough to enjoy Channel Operator status to create our own Frequently Asked Question entries and recall them with a simple command line for all to see. There are other handy scripts knocking around too, which automatically greet people you know, grant Op status to friends when they enter (if you are a Channel Op yourself), and so on.

A word of warning, though. One script I used to use, which automatically accepts any files being sent to your machine, can prove a pain at times. If some irritating fool decides to flood the channel with DCC send requests you will find yourself flooded out and will have to rejoin the channel. With this in mind, rather than employing that particular script you would probably be best waiting for AmIRC's own version of selective AutoAccepting, which at the time of writing is promised, amongst a host of other features, for the forthcoming version 1.2.

Gonna get myself konnected

An attractive front-end for Net users is due to be released imminently as Freeware. Konnection from Piper Communications is fully modular, saving precious memory by only loading modules when required. Like existing front-ends, it ties together everything from Web browsers to e-mail programs and newsreaders.

However, Konnection boasts configurable menus for launching those programs, and has full support for AmiTrack (a handy program which allows you to see when people you know are connected). It can also launch AmiPhone, AmiTalk and AmiSlate and connect to a selected user, and it keeps on-line time even when it's not running. In addition to plenty more features, it also uses MUI and has a drop-dead gorgeous interface. So keep your eyes peeled because it could well be on Aminet by the time you read this.

Hello there

If you've any comments, suggestions or queries you can contact me at dave@dcus.demon.co.uk, or davecus@idg.co.uk.

Phil South completes his series on how to bring an Amos project to fruition

And finally...

part 4

So far in this series we've been talking about how to plan and create a multimedia catalogue for your products, should you indeed have any products or enough to warrant a catalogue anyway.

Now we have to answer a few cosmetic questions, like whether we want the pictures of the products to occupy a screen above the buttons and a text description to appear to the right. Text boxes are easy to implement, and you just use the AMOS Windows commands:

```
Screen Open 0,640,200,16,Hires
Cls 0
Flash Off
Paper 7 : Wind Open 1,0,0,40,20 : Print "Here
is a window..."
Paper 4 : Wind Open 2,320,0,40,20 :Print
"...and here is another one."
Wait Key
```

There you have a text window, or at least two, side by side. As you can see this is easy to use for our multimedia program, as we simply put the text area off to the right of the screen and put text to the window.

Windows operate just like text screens so they are simple to clear and add new text to. Just put a loop into your program which puts the appropriate text with the correct pictures. So now when you click on a product button the text in the box will alter.

The format for windows is like so:

```
Wind Open <window number>,x1,y1,x2,y2
```

where the x1 and y1 are the pixel co-ordinates from the top left hand corner, and the x2, y2 co-ords are the number of columns and rows of text you want in the window.

To write to the window simply use the:

```
al = Window 1
```

command to write to window 1, and so on.

Putting a picture into the frame is similarly simple. You can either combine two screens with dual playfield, or simply reload the whole screen with the chosen picture pasted into the slot. Personally I prefer the latter course as it's easier and quicker to learn. And it's much more effective in code terms because all you do is load another IFF screen using one line of code:

```
Load Iff "newpicture.iff",0
```

whereas the fancy pants method will just burn lines upon lines of code.

So we've taken a program from start to finish and while this will not set the world on fire, it's a good basic program for multimedia uses.

Obviously if you have acres of MOD files and pictures to show it's worthwhile making the program on CD ROM (see issue xx for information about CD ROM burners) and compiling your code so it just runs from an icon on the Workbench.

• *Next issue I'll be looking at special effects, and how you can make your programs drop jaws and pop eyes wherever they may go. Until then TTFN!*



Any other business

Anything else you should know about planning and making programs? Learn your AMOS. Either read this column on a regular basis, buy a batch of back issues or buy a good book on the subject (I believe my *Mastering Amiga AMOS* is still in print!) and try out all the tutorials.

• Get on to the Internet and share information with other AMOS coders. But most of all planning is of crucial importance. After all, if you don't know what you're planning to do in great detail, how are you going to figure out how to write the code?

• Make the program in bits and assemble those into the full program. Separate each routine and work on it, making it do its own thing properly, before you move on to the next thing. Where possible make sure you pass the variables to each routine using the same variable names, so that you can mix and match routines from other programs to make new programs in half the time.

• Try to employ the services of someone who can draw to design the interface. I know it sounds a bit lame, but I've seen so many programs which look like they were designed by a chimp. In fact I'm sure some of them were designed by chimps, but they are just better coders than they are artists.

Set out your interface clearly, so that anyone can see what it does at a glance, and the function of each button and menu is obvious. Quirky methods of operation are not funny, especially when you are looking for a menu and can't find it. And while you are at it, make as few controls as possible, and don't spoil people for choice. Choose a simple elegant scheme and stick to it.

There that's all. Good luck, and send me some of your multimedia programs so I can see how you're getting on.

Write stuff

If you have any other AMOS programs or queries about AMOS, then please write to the usual address, which is: Phil South, Amos Column, Amiga Computing, Media House, Adlington Park, Macclesfield, SK10 4NP.

Please send routines on an Amiga disk with notes on how the program works on paper, not as text files on the disk. Make the routines short enough to appear in print – no more than about 30-40 lines of code, and if possible make them use no external graphics, or if they can't be used without them be sure to provide them on the disk in native IFF format, and the same goes for sound files. Follow these guidelines and you'll be sure of making me a happy man if nothing else.

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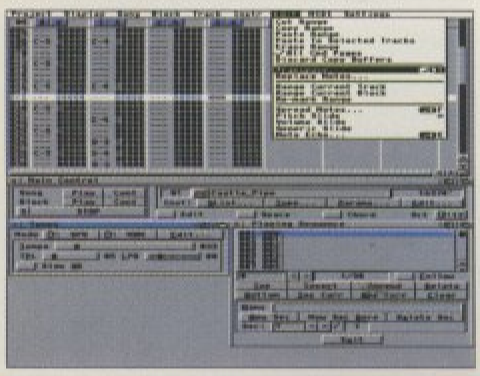
Making tracks

Paul Overaa explains the importance of OctaMED Sound Studio

There's no doubt that the Amiga's music scene, which had been a little the worse for wear during the early part of the year, has recovered somewhat recently. And the package that provided the (fairly predictable) boost is of course the appearance of the OctaMED Sound Studio.

One of the most talked about features of this new offering is the sample mixing routines which allow up to 64 independent audio channels and support both 8- and 16-bit sample use. Instead of the old arrangements, which were tightly tied to the audio hardware of Amiga, the new scheme is far more flexible since it is hardware-independent. Already, several output options are available, namely Amiga (8- and 14-bit), Toccata (16-bit), Maestix (16-bit) and Delfina (16-bit).

Audio data, being pre-mixed before being thrown at whatever sound hardware you are using, has opened the floodgates for many of the other enhancements found in the Sound Studio, including the fact that it is now possible to store song modules (or parts of them) directly to disk as digital sample data. This means, for example, that you can now create a drum loop using several tracks with a collection of drum sounds, and then save it in digital form. The resulting sample then only takes one channel when you load it in and use it as a drum part. Previously, the only easy way of doing this sort of thing was to sample a drum pattern from a drum machine. Incidentally, a special 'Smoothing' switch is available now when digitally recording to disk that, by filtering out unwanted frequencies, is able to improve the overall audio quality.



Users of earlier OctaMED versions will find it easy to get to grips with the new Sound Studio way of doing things.

Needless to say all this hi-tech wizardry comes at a price, and at the end of the day, it'll be the speed of your Amiga that provides the overall limiting factor. Mix mode uses special tricks, and notes can lose sound quality on slow Amigas. In short, the faster your processor the better, and for acceptable quality you really need a minimum 68020 processor (as found in the A1200).

Enhanced

It's not just the new sample arrangements that have hit the headlines. The notation editor, which didn't exist in OctaMED V6, is now back in enhanced form. The Sound Studio, however, is still primarily a tracker-based sequencer, and the notation editor really exists just to offer a different way of displaying and entering notes, rather than providing comprehensive and professional score entry. That said, the Sound Studio's notation editor should be more than adequate for most needs. It'll handle up to 16 staves and each tracker track can be assigned to any staff. Staves (treble, bass and alto clefs) can be named, and even their vertical positions and width can be adjusted. Time signature are now freely selectable and a compugraphic notation font is provided for better print quality.

Bottom line

Requirements

RED *essential* **BLACK** *recommended*

1 Mb RAM — 68020 — 2.04+ Workbench

Product details

Product	OctaMED Sound Studio
Supplier	RBF Software
Adress	169 Dale Valley Road, Southampton SO16 6QX England
Price	(with manual) Registered V6 users, (include your V6 ownercode with order), £35 sterling inc postage. The full (not registered V6 owner) price is £65 plus £5 postage *(This FULL price includes a year's free membership to the Med User Group)*

Scores

Ease of use	95%
Implementation	95%
Value For Money	92%
Overall	94%

And more, much more than this...

Another feature of the new package is that in 4-channel mode, samples can reside not only in ChipRAM, but in FastRAM. You can, therefore, fully utilise all the memory you have installed. There's a new window which allows you to do search-and-replace operations on notes, instrument numbers, commands and so on, an instrument list window for easy viewing and selecting of instruments, and a greatly improved ARexx interface.

The package can now also load modules created on two different PC sequencers: ScreamTracker 3 (S3M) and FastTracker 1.0 (not all S3M effects are supported, but most modules play without trouble). Some signed/unsigned and byte swapping raw sample conversion options for 16-bit samples have also been added (useful for users who use samples prepared on PCs). And, if you're lucky enough to own two Amigas, there's another bonus – you can use the MIDI menu's Slave Mode Active item to link them. You can then compose your song using one Amiga with the other just acting as an extra note player.

There are, of course, many smaller improvements over earlier versions as well. A song annotation window allows you to attach copyright notices, author name, explanatory text and so on to your compositions. Default directories for loading songs, instruments and executing ARexx scripts can be set and saved. ARexx scripts can be executed with a new menu item and file requester combination. There's a menu item for opening AmigaDOS shells on OctaMED screens for quick command line jobs. Instead of requesting the file format when saving instruments, the Sample List Editor now has menu items for default formats. And Cut/Copy operations now optionally affect either all command pages of the block, or just the current page.

Having seen all the beta test versions and so on, I've known how good this program was going to be for a long time, and the final version really does live up to all expectations. A lot of work has gone into the package and it shows – the OctaMED Sound Studio is quite simply the best tracker that has ever appeared, or is ever likely to appear, on the Amiga!

Steve White contiinues his tutorial, this month he looks at adding interface gadgets

Blitz Basic 2

Blitz and pieces

Welcome to the third instalment of the Blitz Basic 2 tutorial. Last month we started writing the actual code for the BOOTIt main program. Now we will be adding the interface gadgets to the main window and creating a loop to check for gadget presses.

The first thing we need to do is to define the gadgets before we actually create the window. Last time I demonstrated the various gadgets BOOTIt will require and labelled them. You can see the definitions below for the gadgets and this code should be placed directly below the line:

```
Let gadgetid=50
```

If you want to check the syntax of each gadget you can find them in the manual. The basic syntax is *gadget type, GTList number, ID number, x pos, y pos, width, height, title name* and then the flags which change the position of the labelling text. Type in the following:

```
.gadgets
GTListView
0,gadgetid+1,8,15,250,96,"WBStartup
Contents:",$4|$20,contents()
GTCycle
0,gadgetid+2,274,3,100,13,"",$1,"None|All"
GTButton
0,gadgetid+3,274,17,100,13,"_Rescan",$0
GTButton
0,gadgetid+6,274,82,100,13,"A_bout",$0
GTButton
0,gadgetid+4,274,96,100,13,"_Okay",$0
GTButton
0,gadgetid+5,274,110,100,13,"_Cancel",$0
GTText
0,gadgetid+7,71,129,303,13,"Report:",$1|$20,"
Waiting..."
GTCheckBox
0,gadgetid+8,228,111,20,20,"Disable User-
Startup file?",$1|$20
```

You will notice that the first gadget ID number is in fact *gadgetid+1*. You may remember that the variable *gadgetid* is set to 50 to avoid conflict problems with Workbench 2 in which the designers pinched ID numbers 1 to 50.

Using a gadget ID of 1 to 50 is fine on Workbench 3 but if you use these numbers on a Workbench 2 application it will crash. Therefore, our first gadget ID is set to *gadgetid+1* which makes it 51. Subsequent gadgets are called *gadgetid+2, gadgetid+3, gadgetid+4* etc.

The above code will effectively create eight gadgets of the GadTools class but you won't see them immediately. Gadgets must be placed after a window has been defined. Unlike the old gadgets, GadTools are actually attached to the window with the AttachGTList command. What we need to do now is to create a window and then attach the gadgets.

```
.main
Window 0,(WBWidth-391)/2,(WBHeight-
(158+font))/2,391,158+font,$0004|$0008|$1000|
$0002,"BOOTit V1.0"+Chr$(223),1,2
al = AttachGTList 0,0
GTBevelBox 0,4,11+font,266,126,$0
GTBevelBox 0,270,11+font,116,126,$0
GTBevelBox 0,4,137+font,382,19,$0
```

The first line creates a suitable window. The window is given the ID number 0 and then the x and y pixel positions are given in (WBWidth-391)/2,(WBHeight-(158+font))/2.

Once you have got the width and height correct, in this case 391 and 158+font, you can use these values to position the window slap bang in the middle of the Workbench screen. You effectively take the window width and height from the Workbench width and height using the WBWidth and WBHeight commands, and then divide that result by 2. The *font* variable is added to the window height to accommodate for varying System Font settings (see last issue).

The next line, AttachGTList attaches the previously defined gadgets to the window. The first number is the gadgets GTList number (0) and the second is the window ID number (0). Once this command is executed the gadgets are drawn in their correct positions in the window.

The next three lines drawn the borders that give the interface that special look. The GTBevelbox must be executed after a GTList has been attached to a window. The 0 is the GTList that the bevelboxes belong to - and ID is not required as there is no need to reference GTBevelBoxes for content. The flag at the end of the command, $0, tells Blitz which way to render the GTBevelBox - $0 for raised and $1 for recessed.

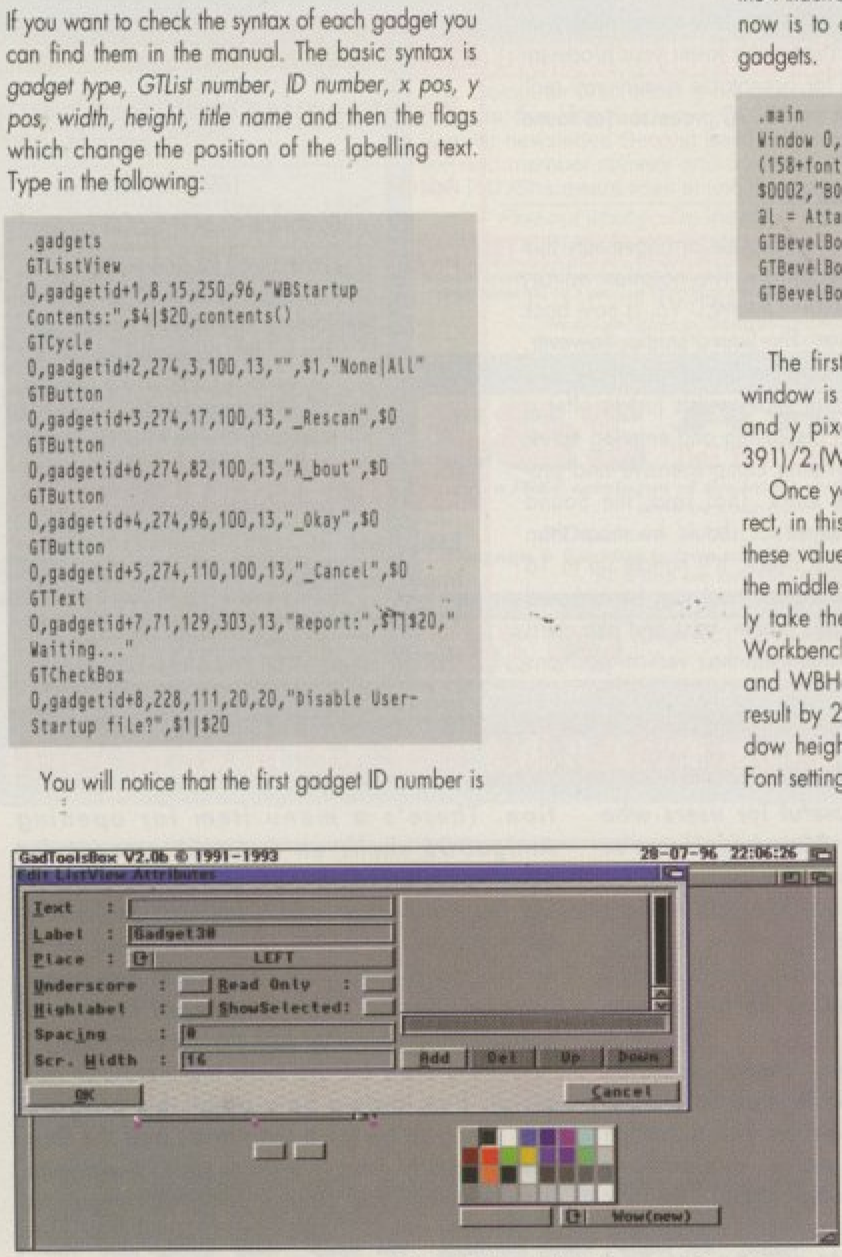
THE RIGHT EVENT

Now that the main interface is finished with we can then start adding some interactivity to the program. This means we have to provide some way in which the user can actually select options from the interface. We do this using a loop that contains code to test for events such as key presses, gadget hits and window events. Underneath the interface code enter the following:

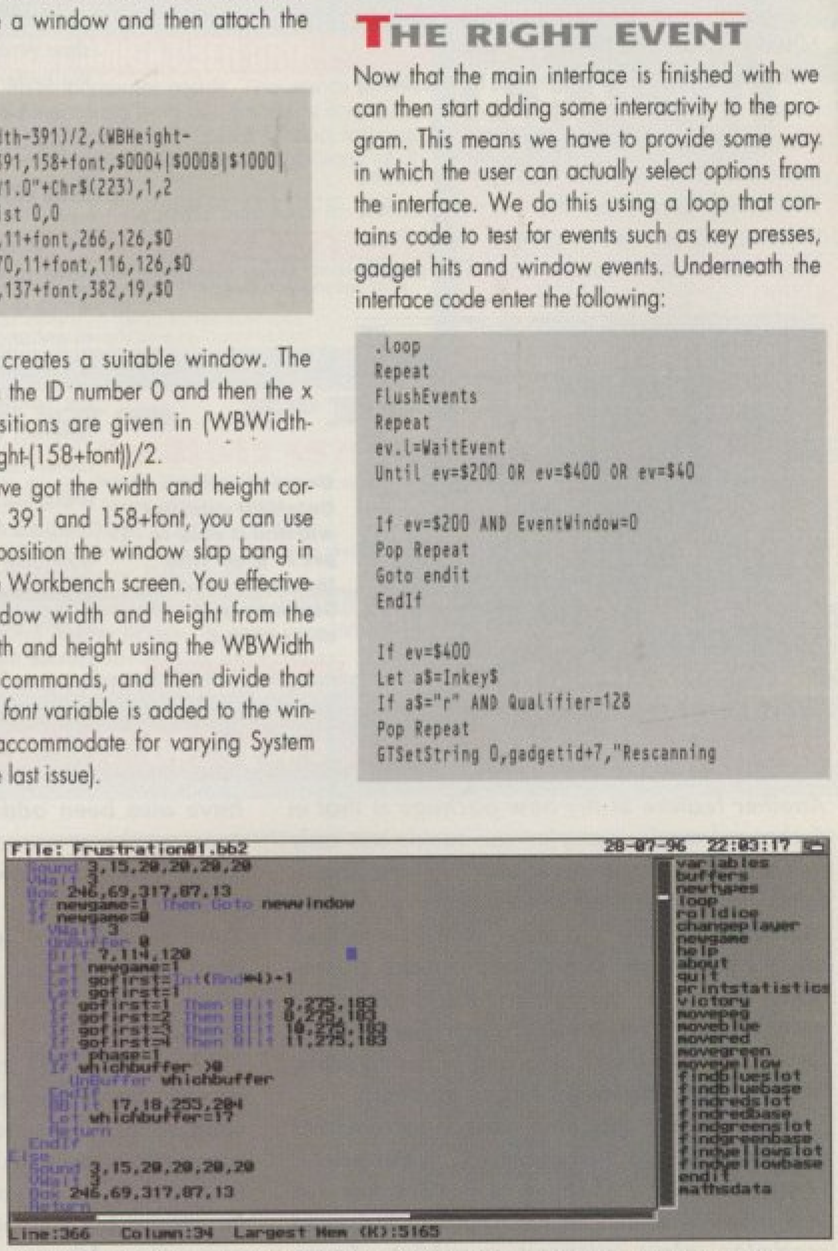
```
.loop
Repeat
FlushEvents
Repeat
ev.l=WaitEvent
Until ev=$200 OR ev=$400 OR ev=$40

If ev=$200 AND EventWindow=0
Pop Repeat
Goto endit
EndIf

If ev=$400
Let a$=Inkey$
If a$="r" AND Qualifier=128
Pop Repeat
GTSetString 0,gadgetid+7,"Rescanning
```



Designing interfaces can prove a real hit and miss affair. You might want to check out GadToolsBox which is available on Aminet. You'll also need the Blitz Basic convertor



Designing interfaces can prove a real hit and miss affair. You might want to check out GadToolsBox which is available on Aminet. You'll also need the Blitz Basic convertor

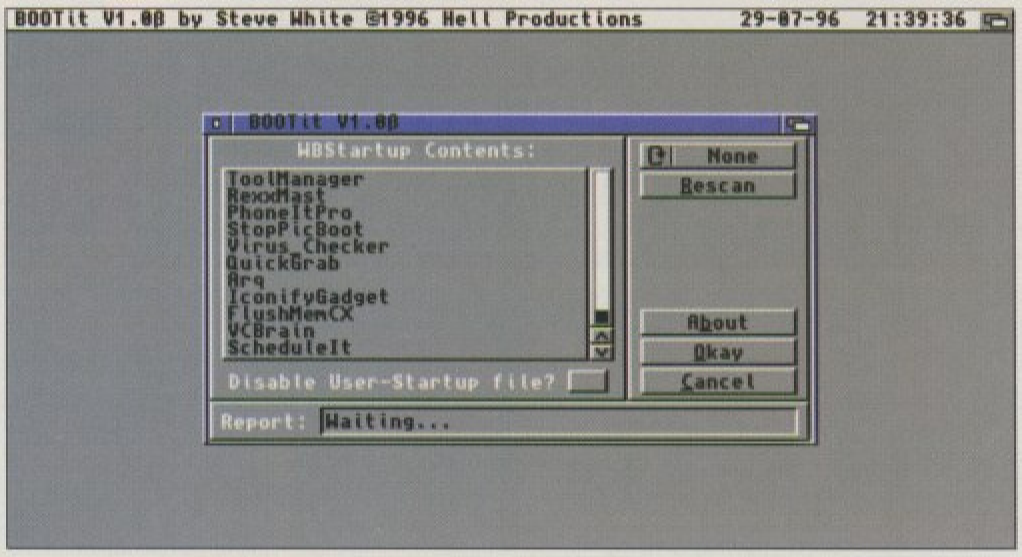
```
WBStartup drawer..."
GTChangeList 0,gadgetid+1
Gosub readwbstartup
GTChangeList 0,gadgetid+1,contents()
GTSetString 0,gadgetid+7,"Waiting..."
Goto loop
EndIf
If a$="o" AND Qualifier=128
Pop Repeat
Goto okay
EndIf
If a$="c" AND Qualifier=128
Pop Repeat
Goto endit
EndIf
If a$="b" AND Qualifier=128
Pop Repeat
Goto about
EndIf
If Asc (a$)=139
Pop Repeat
Goto help
EndIf
EndIf

If ev=$40
If GadgetHit=gadgetid+1
Pop Repeat
Let ec=EventCode
Goto togglestatus
EndIf
If GadgetHit=gadgetid+2
Pop Repeat
If selected=0
Let selected=1
Goto allstatus
Else
Let selected=0
Goto nonestatus
EndIf
EndIf
If GadgetHit=gadgetid+3
Pop Repeat
GTSetString 0,gadgetid+7,"Rescanning
WBStartup drawer..."
GTChangeList 0,gadgetid+1
Gosub readwbstartup
GTChangeList 0,gadgetid+1,contents()
GTSetString 0,gadgetid+7,"Waiting..."
GTSetAttrs 0,gadgetid+2,#GTCY_Active,0
Let selected=0
Goto loop
EndIf
If GadgetHit=gadgetid+4
Pop Repeat
Goto okay
EndIf
If GadgetHit=gadgetid+5
Pop Repeat
Goto endit
EndIf
If GadgetHit=gadgetid+6
Pop Repeat
Goto about
EndIf
If GadgetHit=gadgetid+8
Pop Repeat
If ss=0
Let ss=1
Else
Let ss=0
EndIf
Goto loop
EndIf
EndIf

Forever
```

Code Corrections

In last month's instalment of the Blitz Basic 2 guide there were a couple of errors that somehow crept into the demonstrated code. In the section titled The Storage Array you will notice that line 5 and line 13 have the text @l = before them. Just delete this otherwise the program will kick up an error. However, if you are using the source code on the disk you will have no problems.



The main loop in BOOTit checks for window, key and gadget events. So, when you click on a gadget, the loop registers it and follow any instructions associated with that gadget

Now although the above code may look complicated it is fairly straightforward on closer inspection. The first Repeat basically runs the main loop. If an event occurs but it is not one we are checking for the loop is continued by the Forever command at the end of the loop.

The next Repeat controls the checking of events. After the repeat we wait for an event, using WaitEvent, the result of which is stored in *ev.l*. The next line keeps looping to the second repeat *Until ev=$200* (a window event) *OR ev=$400* (a key press) *OR ev=$40* (a gadget hit). If one of these events is received, program flow breaks the loop set by the second Repeat and continues down the code.

A little interaction

Once the loop is set up we can then begin testing for specific events. Notice the section of code that reads:

```
If ev=$200 AND EventWindow=0
Pop Repeat
Goto endit
EndIf
```

This basically tests *ev* for $200 (a window event) and then checks that if a window event did occur it did so in window ID 0. The next line is very important - Pop Repeat. In the line below Pop Repeat we exit the entire loop and jump, or Goto, a new section of code, in this instance called endit.

This means that we are prematurely exiting a Repeat loop (this is the first Repeat that loops with the Forever command). What happens is that when a Repeat is executed, the position of the program at the time the Repeat was encountered is pushed onto the stack. When the Forever command is executed this position is popped off again and program flows continues at this point - in this case this is the first Repeat and this is how the loop works.

Now, because we have exited the Repeat Forever loop prematurely we have to forcibly pop the position set by the Repeat back off the stack. You must always exit loops cleanly and that means popping off any positions that have previously been popped. Invariably this means Repeat Forever loops, Repeat Until loops (the second Repeat type), Gosub Return loops and For Next loops.

If *ev* does not equal $200, program flow continues after the Endif command and the next set of event checks are executed. Using this knowledge you can probably make a fair judgement as to what the other checks are for.

Don't worry, I'll explain each check independently next month. The code will still not compile without errors so next month I will provide some small code examples on how to make BOOTIt compile with the code so far.



The GadTools gadgets, used with a sense of direction, can provide user-friendly interfaces with the minimum of fuss - check it out you Windows users

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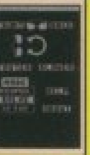
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U436 The RIPPER COLLECTION(not WB3) lot ripper
U442 SYSINFO test & print info on your AMIGA sys
U444 FONT FARM font creator/editor/design new font
U457 WHOM 2 (3DISK) Detail/database on 51 films
U470 FINAL FONTIER 1 (2 disk) Star-trek magazine
U473 FINAL FONTIER 3 (4cdisk) Star-trek magazine
U480 HARD DISK CLICK-HardDrive menue system
U490 B-tec Util- Amazing pack with 207 utilities
U491 PROTRACKER V3-Best music writer programe
U492 WORK-STATION(2disk WB1.3 only)WB-replacement
U495 HARD DISK UTIL bril collection of Harddisk util.
U496 EASY PRINT (A500only) lot of print util
U498 WORK-MATE-15 brillant disk util compilation
U501 THE MUSIC CONSTURICTION KIT(state amiga own)
U504 HOT-STUFF-more util disk compilation
U505 VIRUS-KILLER & DISK RESALVAGE/REPAIRE KIT
U507 DCOPY V3 PROFESSIONAL -Excelent Disk copier
U509 ULT BOOTBLOCK 40-bootblock generator/maker
U510 ULTIMATE BOOT-BLOCK Collection II +more
U512 ZIRCON UTIL-30 MOST USE UTIL 2 brillant
U515 WIT COMPLETE UTIL 20 most use util
U521 SPECTRA PAINT III Very good paint packages
U550 SCENERY CONSTURCTION KIT fractal .recommend
U551 ASSASIN BOOT BLOCK over 50 bootblock protector
U555 CROSSWORD CREATOR (not WB3) crossword maker
U561 PERM CHECK a full POOL PREDICTION program
U568 ICON CONSTURCTION KIT icon making program
U569 ICON ready made (4 disk)
U590 A600 NUMBERIC PAD EMULATOR (A600 only)
U591 DEGRADER (not WB 1.3) A500 emulator
U592 KILL AGA-make older programe run on A1200
U600 C64 EMULATOR II util & document
U601 DISKSALV II + ABACKUP (not wB1.3)
U603 THE CHEAT COMPENDIUM for over 450 games
U620 HOW TO CODE IN C (2disk) + many examples
U622 ACTION REPLAY V1.5(A500/600)-cartridge on disk
U623 ACTION REPLAY V4 (A1200 ONLY) same as above
U645 PC EMULATOR V.2.31(WB3 only) SVGA PC emulator
U650 COPY & CRACK TOOL 2 more powerful copy program
U680 NEW SUPER VIRUS KILLER(not WB3)kill 315+ virus
U689 FORCASTER V2-horse racing predition program
U690 ASSASIN COPIER (lots/include Xcopy3/dcopy ect
U694 SUPER DUPER 3. (NOT WB1.3) Vfast disk copier
U696 AMITOOL PROFFESIONAL disk database tool
U699 MEGACHEAT V3 +(more games cheat even for)
U700 ANIMATION CONSTRUCTION KIT V1.2 + good
U702 V MORPH V2 create smooth morph animation
U703 POOL TOOLS 3(Latest)prediction horse racing.
U705 TRON-CAD-best create circuit board+examples
U707 GAME TAMER(3&4)-(2)For even more games cheat.
U708 LAST WILL & TESTAMENT-write your will
U710 PERFECT-PAINT 32 Very easy to use paint package
U714 ENGINEER KIT various test kit for Amiga
U718 MAGNUM 1.5 REGARD the best disk magazines creator
U721 FONT FARM V3 + load of font + font viewer
U723 EXOTIC RIPPER rate as the best sound/graphic riper
U724 PARNET SET UP(2) require for the connection
U725 PARNET CABLE MAKER INSTRUCTION project save £££
U728 AREX MANUAL(notWb1.3) complete manual.
U729 ASSASIN BOOT UTIL 50 boot block creater util
U730 SOFT AGA (A500plus or A600) & min 1.5 meg
U731 A - Z GAMES CHEAT for over 500 games
U732 MINI MORPHS create TERMINATOR 2 effect
U736 AWARD MAKER II-hundred of ready made
U737 ASSASIN CRUNCH & COPY TOOL (WB 1.3 only)
U738 S.KICK PROFESSIONAL v3.2 Various. K-start
U739 TURBO IMPLODER V3.1 powerful disk cruncher
U740 CROSS DOS 5.1 plus read/write PC<>AMIGA disk
U741 HD-DISK TOOL BOX +many more Disk util recommend
U742 HOW TO CREATE AUTOBOOT DISK.complete + util
U743 Util .Disk .Maker v3. MAKE AUTO BOOT DISK
U744 FRACTAL MANIA-BIOMORPH Brillant collection
U745 AF WORK BENCH (3)(WB 1.3 ONLY) replacement
U746 3D GARDEN DESIGNER & view from any angle bril
U747 ASTROMY V2 predict star planet prediction.
U749 DISK REPAIR 3(floppy & HD)include soft-proctect
U750 MUSIC CATALOGUE (not A500(1.3) very easy to use
U751 SYTEM CHECKER TOOL must for any Amiga owner
U752 HARD DRIVE UTIL+lot more Hard DRIVE UTIL
U754 PARBENCH installer (complete)
U756 PRO CAD electronic,latest circuit board designer
U758 WB MENU LAUNCHER-menu system, easy to use
U760 ICON PLUS (3DISK) Hundreds of stunning ICONS
U761 RELOCKIT 1.4 latest WB1.3 emulator
U762 FAKE FAST MEMORY make more older software run
U777 TELE TEXT RECEVER project. highly recommend
U781 DOSTRACE V2. display infomation why some programe refuse to run. also monitor Amiga activity. RECOMMEND
U780 POOL WINNER GOLD must for all gamber
U789 HARD-DISK MEMORY V2 use HD as memory (re MMU)
U790 WINDOW BENCH V2 (WB 2/3) 2disk new workbench replacement, include lot of useful utilities
U791 COMPUTER DIAGNOSTIC TEST V9 amiga Fault finding
U800 PRINT A CARD include many ready made
U801 MULTI-PRINT V4 lot of printing util
U805 DISK PRINT print custom disk labels
U807 FONT & PRINT Load of utilities to view & print your font collection. RECOMMED
U830 POOL WIZARD -(football) prediction
U832 DIVENDEND WINNER - Prediction rograme for use with LITTLE WOOD, VERMON, ZETTER Ect
U834 FORCASTER 2.02 New Horse prediction Prog
U839 AUDIO MAGIC 4-Protracker V3,Exotic ripper
U843 AUDIO MAGIC 8- Octamed player ect
U846 C64 emulator V3 (3DISK) C64 emulator/latest
U848 SPECTRUM EMULATOR V3- Spectrum emulator latest
U850 EAGLE PLAYER (2disk) the best music player.
U851 DELI-TRACKER (2disk) play all music format.
U881 SONIC DRUM KIT V3 Make drum sample
U882 DISK COPY Pack- collection of 10 disk copier
U883 OPT-Utils 1-over 30 disk copier/Optimise ect
U885 INTUTION BENCH MARK V6.5 (Not Wb1.3) sysinfo
U886 COMPLETE WB UTIL (3DISK) very useful Util col
U887 DISK REPAIR KIT 4-include disk repair, undelete,softproctect, diskmate, sysinfo,ect
U950 STEREO-SCOPIC V2.a (not A500/1.3) This is the RANDOM DOT STEREOGRAM generater.
U951 FORTH PROGRAMMING (NOT WB 1.3)
U957 SCALA BACKGROUND (2disk) High quality image
U960 PROGRAME LOADER-New HardDisk menu
U961 MAGAZINE E 3(2disk) science fiction magazine
U963 AMOS & AMOS PRO COMMAND EXTENSION
U967 PRO-GAMBLE-Super Horse prediction programme.
U978 DELUXE PAINT 4 BUDDY SYSTEM-(2) Get the most out deluxe Paint instan on line for erry fuction.
U981 VIRUS CHECKER V6.34 --AUTO UPDATE MONTHLY--
U982 DIRECTORY OPUS V4 add Extra Command/BUTTON
U983 MAGIC WB & MAGIC MENU. Both Latest version
U986 VIRUS-WORKSHOP V5.1-the best Virus killer
U987 GRAPHIC-CONVERTER (2D) Convert picture ect
U988 TURBOCAT Auto catalogue your disk library
U989 AUTOBOOT DISK MAKER V4 -very useful
U993 IMAGINE STUDIO V2.(2D) The best PD image (picture) processor available rival even the commercial costing hundres of pound. (not a1.3)
U969 POWER-CACHES Speed up disk loading,Accesses
U970 HARDDRIVE SECURITY II Large collection of HD sserity programe eg Lockout2,Password & many more
U971 HARD-DISK & FLOPPY DISK DOUBLER (Equip/notWB1.3
U973 CHEAT FOR 800 + GAMES, LEVEL CODE V3.3.(2)
U974 HD GAMES INSTALLER 2 install tops games to HD. EG.ZOOL2, Rise Of the robot,Mortal Combat2 & more
U975 DMS V2.04 Pro. Crunch entire disk. (not1.3)
U976 MAGIC SLECTOR V1.4-Change Magic WB back drop
U977 MAGICWB ICON ARCHIVE (3) 1000's of MGwb icons
U998 X-PASSWORD-protect your hard/floppy drive
U979 ICON ACHRIVE(3) 1000's of normal icon(any Amiga)
U994 TEXTURE STUDIO. Render Various Texture for use with Imagine 3 ect req FPU (not 1.3)
U995 PRO-GAMBLES V2 must for all gamblers.
U996 BOOKIE BEATER- gambling programe to win bookie
U997 HD GAME INSTALLER 3. install more game to HD
U998 EXOCTIC RIPPER V3.b Latest ripper
U999 HD MEMORY (new collection) require MMU
U1000 MAGIC OPUS VOL 2 & 3 (2D) more Dopus button
U1001 CAR DATA ANALYST-check your car performance
U1002 TURBO CAT-(WB 2&3 only) catalogue creator
U1003 LOTTORY WINNER V2-new version
U1005 BASIC-ELECTRONIC-Teach all about eletronic
U1006 LOTTO LUNACY V3 Update latest lottery predictor
U1007 ALL NEW HARD-DISK & FLOPPY DISK TOOL 2 (2)
U1008 HARD-WARE PROJECT 2 (2) Build dozen of project even how to fit Amigas in a tower case
U1009 DATA ALERT 3-explain why your computer crash
U1010 WB2.04 INSTALLER-install A500+/A600 to HD

PUZZLE GAMES II

Massive collection of the best puzzle games ever released including some of the classics like Nubic Cube, Picture Puzzles etc, much too many to list. Very popular.
5 disk pack only £4.99

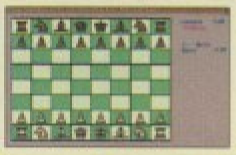




ARCADE GAMES II

COLLECTION OF THE VERY BEST SHOOT EM UP
MUST FOR ANY GAMES PLAYER
5 disk pack only £4.99





BOARD GAMES II

The very best board games ever released. This pack contains the very latest, CHESS, CHECKER, SCRABBLE, MONOPLY & DOMINOES recommended.
5 disk pack only £4.99

Printer Pack

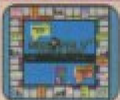
5 disk pack with all the latest printing programs specially designed for printing out high quality documents, text & pictures etc and it is even able to print out A5 Booklets (very handy). Easy to use.
A must for any Amiga owner with printer.
Printer Pack (5 disks) only £4.99

GAMES

G222 MEGA 21 GAMES amazing 21 games
G235 DRAGON-CAVE brillant 3D puzzle games
G240 QUADRIX very addict excellent
G242 TAKE EM OUT like to Operation wolf
G253 DESTINE MOON BASE Arcade conversion
G272 TANK BATTLE 2 player tank battle game
G278 ARCADIA the best ARKNOID clone
G300 Q-BOID cross TETRIX and INVADERS.
G303 DIMENSION X 2 player LIGHT CYCLE GAME
G310 NEBULAR Excellent 3D shoot em up
G316 GALACTIC Excellent 8 levels arcade
G317 HYPER-BALL Speed ball +level editor
G320 GHOST-SHIP Very good 3D adventure
G325 BATTLEMENT hunch back of notcha
G326 MEGA GAME COLLECTIONS III 3 top games
G329 MADONNA NUDE PUZZLES for 18+ only
G331 GRAVITY massive space exploring game
G333 CYBER-NETIC Brillant 8 way blaster
G334 DONKEY KONG (A1200 order code AGA296)
G335 CRAZY SUE II- best platform to date
G342 SUPER SKODA CHALLENGE (& track editors)
G344 STAR-TREK similer to RAID2 but harder
G355 DOODY very cute & extremely addict
G356 WONDER LAND amazing graphic recommed
G362 DELUXE PACMAN - best pacman ever release
G367 CARD GAMES collection
G368 WIZARD-DOMAINS-dugeon type games
G370 KALATRIZ (notA1200) arcade tetris clone
G373 AIR ACE II Very playable shoot em up
G384 OTHELLO best PD version
G386 MOUSE IMPOSSIBLE very addictive puzzle
G390 TETREN most polish Tetris ever release
G392 STRIKEBALL brillant base ball clone
G399 TRAILBLAZER brillant (not A1200)
G400 FIGHTING WARRIOR like street fighter
G404 DOMINOES only one of it kind on PD
G406 TOTAL WARS -strategy like chess in space
G411 BATTLE CAR 2- 3D car racing
G431 NESTER CARD GAME- hours of fun for a quit.
G435 ROULETE american roulete excellent
G438 TRAILBLAZER 2 C64 conversion
G441 E-TYPE 2- very good asteroid great graphic
G443 OLEMPAD DISK (2D) Olympic sport events
G445 DESCENDER GAME tank, search & desender
G446 OBLIDOX excelent Arcade/Puzzle game
G449 PARACHUTE JOUST quite playable
G455 CASTLE OF DOOM V2 graphic adventure.
G460 WIBBLE WORLD GIDDY Large platform game
G467 CASH FRUIT- good fruit machines
G475 AMOS CRICKET cricket games
G488 EXTREAM VILONCE 2 player battle out
G489 ENGIMA MACHINE very challenging puzzle
G490 MEGA BALL 2 very playable break out clone
G491 BOUNCE & BLAST brillant platform 10/10
G492 ZOMBIES & DEFENDER 2 fantastic games
G494 MERCANERY SIMULATION 3D wars games
G499 LIFE simulation very interesting
G500 TRANSPLANT dozen of level fast arcade.
G501 KLAWZ THE KAT-great platform games
G511 HIGHWAY HELL like SPY HUNTER on the C64
G531 OPERATION FIRESTORMS-brillant
G534 CASTLE KUMQUAT similer to Alien breed
G535 BLACK DAWN brillant graphic adventure
G538 MORIA 5.4 The latest Dungeon & dragon
G539 BRIDGE Good version of bridges
G540 ORK ATTACK bloody adventure

101 GAMES

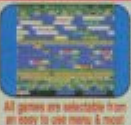
PRICE ONLY £9.99
Brillant collection of over 100 of the very best of PD games includes INVADER 2, Tetris, Monopoly etc. Much too many to list. Very easy to use menu system. Most games come with full playing instructions.
MUST FOR ANY GAMER PLAYER
COMPATIBLE WITH ALL AMIGAS



All games are selectable from an easy to use menu & most games come with full playing instructions

G541 REBOUNCE 2 player futuristic breakout
G542 ROAD TO HELL brillant car racing
G544 SUPERTOM CAT New vertical shoot em up.
G545 KUNGFU CHARLIES mix with platform brill.
G546 RAID 4 latest vertical scroll shoot em up
G548 QUIZMASTER very good quiz programe
G552 ELEVATION games base on lift ??
G560 IMPERIAL WALKER -Base on STAR WAR games
G567 STARBASE 13 (2D) Bril like MONKEY ISLAND
G657 AMOS LOADSA MONEY best FRUIT-MACHINES
G659 MR MEN OLYMPIC (2D) many event to complete
G660 4 L.C.D DREAM 4 small hand held games
G664 NEIGHBOUR GAMES (2D) base on the TV series
G665 TIME RUNNER (WB2/3) Brillant graphic
G667 GOLF (2DISK) One of the first & decent GOLF
G668 AMOS CRICKET 2 New Amos cricket simulator
G669 MUGSY REVENGE gangster graphic adventure
G672 JIGSAW (2DISK) very playable jigsaw games
G673 BOBBY GARDEN + DIGGER (NEW) Brillant
G674 HIGH OCTANE Fast car racing (notwb1.3)
G675 TIME RUNNER amazing graphic adventure
G680 SPACE-INVASION 2 - Fantastic Galaxain
G681 AUTOMOBILES - PD version of SKID MARK bril
G682 BANDIT MANIA - Brillant fruit machine demo
G685 PROJECT BUZZ BAR -Brillant asteroid
G689 GUN FIGHT (not A500(1.3)
G690 THE REAL POPEYE 94 (a500 1.3 only)
G692 SYSTEM DEFEND-Brillant Defender clone
G698 AMIGA-BOY-Game boy emulaor + tetriz
G732 DETHELL IN SPACE. Recommed.
G735 OVERLANDER Brillant arcade MOON ALERT
G737 SERIOUS BACKGAMMON The best in PD BG
G771 STAR WOID (2 Disk) brillant Thrust
G772 UN-SENSIBLE SOCCER very similar to Sensible soccer games. RECOMMEND

101 GAMES 2



All games are selectable from an easy to use menu & most games come with full playing instructions

PRICE ONLY £10.99
This is the very latest all new 101 games compilation pack 2 containing some of the very best in PD games like Zeus, Wonderland, Dragonflies etc. Much too many to list.
COMPATIBLE WITH ALL AMIGAS

G773 FRUIT MANIA -Brillant Fruitmachine.
G774 TRICKLE TREAT -like DOOM on the PC
G775 FOOT-BALL MANAGER-new version
G782 SOLO ASSAULT 3D like Wing Commander
G783 SEED OF DARKNESS-Brillant graphic adven
G784 NANO FLY Superb explore game RECOMMEND
G785 THE GREAT GOLD RAID- very addicted
G787 ANT WAR V1.9 (LATEST) not 1.3
G788 ZENO-MORPH -Great grahic
G789 TASK FORCE very good MIND SHADOW clone
G790 GREEN FIVE Amazing 3D graphic like
G791 PROFFESIONAL BINGO CALLER
G792 MARTIAL SPRIT like Street fighter II
G796 6 EXCELLENT CARD GAMES collection
G809 BLITZ 2 fast action shooting games
G810 EXIT 13 Brillant puzzle
G811 TEMPORAL MISPLACEMENT-graphic adventure
G812 ADAY AT THE RACE-V.Goodhorse racing games
G820 BOULDER ORIGINAL with 80 level
G821 BOULDERDASH cave/level Construction kit
G822 BOULDER COLLECTION 2/3 160 level (2disk)
G839 BOULDER PACK with 640 level on 8 disk
G860 ALIEN NET WORK-new Spacing invader
G862 BATTLE FORCE excellent text adventure.
G863 GNU CHESS the best chess with 10 level
G866 SWORD OF YIGG Graphic adventure
G867 POWER-TETRIZ for 1 or 2 player
G868 SUPER SMASHING TETRIZ
G870 CHESS II & CHECKER One of the best around must for all CHESS or CHECKER player
G871 GRAVITY FORCE 2 1 or 2 player thrust clone
G872 SCHNEBITZ Commercial quality puzzle games
G875 DELEXE GALA v2.3(new) add new feature & bouns gamme + 2 player RECOMMEND. get it now
G876 THE KRILLIAN INCENDENT like ELITE2/Epic
G878 QUANTUM-Maze colect & escape type games
G879 RAG TO RICHES - like MONOPLY

NEW 101 GAMES PK 3

New 101 pack 3 contains over 100 games, runs on all Amigas, only £11.99 offer buy any 2 packs together & receive a free £4 token for use with next order. This offer cannot be used with any other offer current & subject to condition apply.

G884 WIPE OUT-mindless blasting gamse
G885 GODZILLA Another shootem up
G886 SUPER MEGA FRUIT- All new Fruit Machine
G888 DRIVING MANIAC 3D (fill vector like Indi500) car racing- very fast. RECOMMEND
G889 PLANET FALL - Luner Lander clone
G891 BUCK TOOTH ADVENTURE Very good multi level shoot/collect em up RECOMMEND
G892 PENGO 2- Maze type games. Recommend
G893 SUPER OBLITERATION Blast asteroid very similar to PANG 2 lot of weapon RECOMMEND
G894 SUPER INVASION II -New SPACING INVADER
G897 THE SHEPERD Brillant POPULUS clone. REC
G898 ALIEN GENOCIDE (2) Shoot aliens set in space
G899 PUCKMAN. One of the better PacMan arround.
G900 SUPER-BATTLE ZONE 3D (not WB1.3)
G902 M*A*S*H a (ANTWAR 2) play very similar to LEMMING & WORM, with load of Weapon (Brillant)
G904 LAST SOLDIER (2) multilevel platform games
G905 CBBERTECH (2) exclent ALIEN BREED Clone
G906 HANGMAN any one for a game?
G907 ACE SPACE nice Platform games
G908 COLOURMANIA slide/Klatriz type puzzle games
G910 HARRY-HADDOCK- Brillant platformer games
G912 MANGLE FENDER -Brillant, Smash up other car/tank ect to win, extremly addicted, get it
G913 ARCADE GAMES CLASSIC Vol 1 & 2 (2d)
G914 HELICOPTER-play like Desert strike
G915 COW WARS. Very addicted 2 player games
G916 ISLAND -Play like Monoply
G919 COP THE LOT Pro Latest Lottery preditor
G920 LOTTERY PROFFESIONAL This version use
G921 MONOPLY. (board games) The best version
G922 JET WILLY 3 - excellent platform games
G923 FLAMMING ENGINE-Superb car racing
G924 POWER MACHINES. Grahicaly brillant shoot
G925 SUCIDE-MACHINE Operation wolf style
G926 ZAXXON 3D Superb C64 3D blaster games
G927 BOING V3. Great platformer, recommend
G928 PUNTER-Animate horse racing games
G929 ARCADE JIGSAW (2d) include LION KING
G930 WHEEL CHAIR GLADITOR-Very fun to play
G931 NIMBLE-Brillant New arcade puzzle.
G933 BLACK DAWN 3- THE NEW BEGINNING (2) Superb 3D adventure. RECOMMEND
G934 RJ ROCKET (NEW)very good rockets games
G935 BATTLE SHIP- the finest PD version
G936 LAST LAP - Fast car racing

GAME HINTS & CHEATS II

Play your favourite game for age? but can't get to the end of level or game? Having problem with some games? 5 disk pack with 1000s of games cheat/help/level code action replay poke etc., should help you finish many games – suitable for all Amigas only £4.95.
Update & release on 28 July '95

EDUCATION

E001 KID PAINTS. superb paint special for kids
E002 COLOUR IT brillant computer colouring book
E003 TREASURE SEARCH find the hidden treasure.
E004 LEARN & PLAY I(not A1200)many maths & games
E005 LEARN & PLAY II more education programes
E006 SPANISH TRANSLATOR Spanish<> English
E008 MR MEN (WB1.3only) brillant story adventure
E009 ASTROMY tutorial on solar/star ect system
E010 SIMON & SPACE MATHS maths & simon games

E011 EDUCATION PACK 1

pack with dozens of education programs ranging from maths, science to educational games recommend suitable for any Amiga. 5 disk pack only £4.95

E019 DINOSAURS teach you all about Dinasaour
E020 WORLD DATABASE require (2+meg)
E021 STORY LAND II interact puzzle games rec
E022 LANGUAGE TUTOR teach you 4 language
E023 TALKING COLOURING BOOK talking Dpaint bril
E024 EASY SPELL II improve your kid spelling
E025 SCRABBLE require 2-4player, brillant
E026 WORDS can help you solve the crossword
E027 OSWALD Very colourful large cartoon game
E030 EVOLUTION breed your own hybrid
E031 IQ TEST + IQ GAMES pack 1 excellent
E033 TYPING TUDOR very good typing tudor
E035 CHESS HELPER help/teach how to play
E036 BASIC TUDOR learn about Amiga basic Prog

EDUCATION & 21 GAMES PACK

Collection of the very best of education programs and a 21 games pack, a very popular combination for kids (run on all Amiga) 5 disks pack only £4.95

E038 AMIGA TUTORIAL 7 part tutorial
E039 COMPUTER CARE how to care about AMIGA
E040 GUIDE TO LOWER BACK PAIN tutorial the spine & how to avoid back pain. (recommend)
E041 KID ALPHABET display all alphabet letter
E042 FRACTION & SILOUEST maths & games excellent
E043 MATH MASTER teach/test you more on maths
E044 STEAM ENGINE V2 graphic & tutorial
E045 PETROL ENGINE tutorial & animate graphic
E046 GAS TURBINE ENGINE tutoria & anim graphic
E047 STIRLING ENGINE tutorial & anim graphic
E050 DREAM FOR ANGEL explain the meaning of dream
E051 INVISIBLE WORLD brillant recommend
E052 FISH TANK turn your amiga into a FISHTANK
E054 DEMOLITION MISSION simple game for kid
E055 WORD POWER solve crossword puzzle ect good.
E056 WORM HOLE simple game ideal for children.
E057 APPLE CATCHER catch falling apple brillant
E058 CROSS MAZE & CRYPTOKING 2 excellent kid games
E059 VERB QUIZ find the word & it related. Bril
E061 KING JAMES BIBLE (4d) complete bibles excel
E066 TARROT clairvoyant in a instance
E068 GALLOW fancy a games of hang man?
E070 MATH DRILLS teach all basic math skill Vgood
E071 ERROR INFO give info why your amiga crash
E075 WORLD-WAR 2 graphics tutorial on WORLD-WAR releate program eg simulate Starprobe/ molecube/ ect
E076 SCIENCE an excellent collection of science ideal for all who interesting or studies in science recommend. this pack come on 4 disks
E080 KIDPRIX great children paint programme.
E081 ASTROMY PACK- This is a mazing collection of programe relate to astromy. can help to locate certain or star position ect. must for anyone who studies astromy or hobby. great (4DISK)
E073 PICTURE & LETTER learn to reads- first step
E074 AMIGA BEGINER GUIDE tutorial on Amigas
E085 NODDY PLAYTIME demo >Very good
E080 KID PIX more excellent paint programes
E081 D.T.P FOR KID easy to use, excellent
E092 SING A RYHMES sing a song
E094 HIGH WAY CODE TUTOR question on highway code
E096 READ & LEARN (2D) THREE LITTLE PIGGY Story
E097 BACK TO SKOOL vol 1 collection of the best
E098 BACK TO SKOOL vol 2 in education programe
E099 BACK TO SKOOL vol 3 & games. RECOMMED
E100 LITTLE TRAVELER infomation on world wide
E101 WORLD GEOGRAPHY world with map & text.
E103 DISCOVERY OF THE ATOM. tutorial on the Atom (2D)
E104 DESK TOP GUIDE TO MUSIC(3D) guide & tutorial
E107 TRUMPTY FIREWORK ALPHABET Very entertaning way to teach your child the ALPHABET
E108 HOW TO DELOVOPE PHOTO 1 (2) Excelent
E109 MR MEN OLYMPIC (2D) many event to complete
E110 CULT TV DATABASE (2D) info on early TV series
E112 HOW TO DEVELOPE PHOTO 2 (2) delevope your own.
E115 ELETRONIC WORLDS(3D) Complete KJames BIBLES
E116 HOW THE EARTH BEGAN-theory how the BIG BANG explode and create all the star & galaxy
E118 WORKBENCH 2 tutorial on Work Bench 2
E119 DINO WAR Quiz on dinosaurs
E120 JUNIOR MATHS Great learning aid for teach kid on the math subjects. RECOMMEND
E121 PICTURE PUZZLE brillant JIGSAW type games
E122 WORD FACTORY Brillant, teach kid words

KID DISKS 1,2,3,4,5

Excellent collection of education programs, Ideal for teaching kids various subjects while retaining the fun & game element. 5 disks only £4.99 or order seperately for only 99p per disk. Order Code KID DISK & No. 1-5

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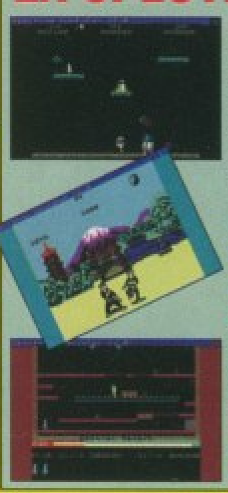


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Paul Austin adds the whistles and bells to the final frontier

3D graphics

Finishing touches

Over the last few months we've developed a concept, drawn the roughs, built the ship and added the all important detail and textures to our project. This month I'll be concentrating on adding realism to the overall image with galaxies, engine flares and the odd subtle touch that simply brings the image to life.

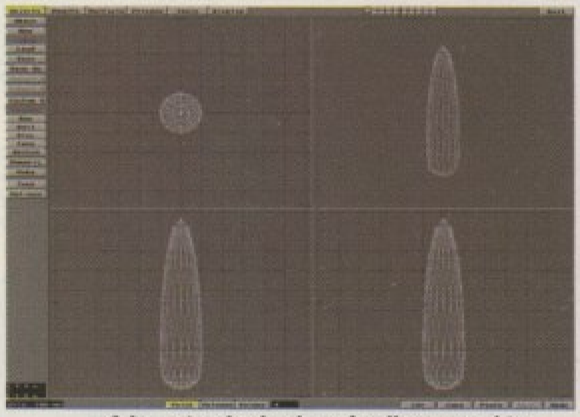
Perhaps the simplest addition is a minor alteration to the background colour. Although deep space is black it's invariably much more attractive and believable if you add a little colour. Using the background gradient controls, simply adjust the zenith and nadir colours to deep, almost black blue colour, leaving the sky and ground colours at their default black.

Although the effect doesn't, and indeed shouldn't, jump out of the screen, it does add depth to the image while enhancing a feeling of volume and truly huge perspective.

For the next trick it's time to head off to your favourite paint package to start constructing and galaxy. It sounds tricky, but in reality it's pretty simple. Using a soft edged air brush simply draw some large splurges of colour. Obviously, there's no real rule to this process, but it's usually wise to use colours which blend easily such as reds and purples, blues and green and so on.



Our improvised galaxy plus the subtle gradient for added emphasis



A bog-standard sphere is all you need to start your engines

Simply slapping down wild variations in colour isn't very convincing. If possible, also vary the opacity of the brush stokes which, in the finished image, will enhance the feeling of variation in cloud density. When you're happy with the overall look make sure you blend and smooth the image, removing the majority of harsh tonal changes. If you wish you could also experiment with twirling the area's image.

Assuming your masterpiece is complete, save it out, but don't close the image. Now your colour map is complete it's time to create the all-important transparency map. To do this, convert you original image to a greyscale and save out. If you don't create a transparency map your galaxy will obscure anything behind it such as a planet, a ship and of course the star field – not very believable!

Once your maps are complete, introduce a flat plain into the scene, and planar image map the colour image into the colour texture filed and the greyscale into the transparency defuse fields. Instant galaxy!

Colour control

Surface colour	255,00
Texture type	Fractal noise
Texture size	0.1,0.6,0.1
Texture centre	0,0,0
World coordinates	off
Texture falloff	0,0,0
Texture velocity	0,0.03,0.001
Texture colour	255,255,0
Frequencies	3
Contrast	0.5

Transparency control

Transparency	100%
Texture type	Fractal noise
Texture size	0.05,0.15,0.05
Texture centre	0,0,0
World coordinates	off
Texture falloff	85,40,85
Texture velocity	0,0.03,0.001
Texture colour	255,255,0
Texture value	0
Frequencies	3
Contrast	1.0

Burning ambition

Although, in this case, we'll be developing an engine flare, the same flame effect can be used with a wide variety of flames. The first step is to produce a suitable shape of the object, and invariable this will be an elliptical or egg shape.

This is achieved by simply creating a default sphere in modeller and then selecting the upper hemisphere and stretching it until you produce the appropriate teardrop shape. When you're happy with the shape, save it out and load up Layout.

Then it's time to add the appropriate colour to the flame. In our case the flame is a traditional red/yellow, but depending on the project you could elect for a blue/white flame or whatever takes your fancy. To achieve the effect we'll need the assistance of our old friend fractal noise. Once the object is loaded, select it and open the surfaces requester.



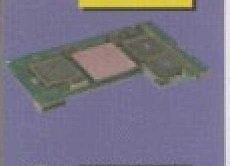
The finished flare in all its glory

Make the colour field 255,0,0 then click the colour texture button and select fractal noise, making the texture colour 255,255,0. The key here is to make the texture size taller in the Y direction and slightly smaller in the X and Z, making the texture itself stretch upwards. In this case I elected to make the texture size slightly larger to produce a longer flare on the overall flame. Once all the texture parameters are set correctly – see flame colour control – it's time to move on to transparency.

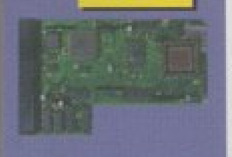
Once again we'll use fractal noise to create the desired effect. However, the real key is to make the texture fade as its energy dissipates – see transparency control. Apart from adding the necessary parameters to the texture field, it's important to set transparent edges to soften the overall form.

The final task is to animate the texture and therefore bring our flame to life. To achieve this we'll use texture velocity to move the texture along the Y axis. It's also worth adding a small amount of X and/or Z velocity in order to make the texture undulate slightly as it travels along the flame. Add a light and lens flare to the heart of the flare and you're done. Have fun...

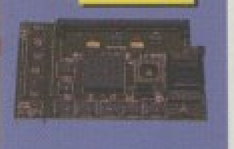
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Not compatible with GVP HD

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SX-32

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